Dr. Dahl

SECOND ANNUAL REPORT OF THE CITY PLANNING BOARD TORONTO

DECEMBER 31ST, 1943

SECOND ANNUAL REPORT OF

THE CITY PLANNING BOARD

TORONTO

●

DECEMBER 31ST, 1943

CITY PLANNING BOARD — TORONTO

(Established June 1, 1941, by By-Law No. 15761)

MEMBERS

	Term Expires
A. G. PARTRIDGE (Chairman) President, Goodyear Tire & Rubber Company Limited	December 31, 1943
E. R. ARTHUR, Prof. Arch. Design, University of Toronto	December 31, 1944
W. C. McBRIEN, Chairman, Toronto Transportation Commission	December 31, 1945
*C. J. WOOLSEY, Toronto and District Labour Council	December 31, 1945
F. D. TOLCHARD, General Manager, Toronto Board of Trade	December 31, 1944
D. M. FLEMING, Alderman, Toronto City Council	December 31, 1943
TRACY D. LeMAY, Commissioner of City Planning	

**Appointed September 1943, in lieu of Wm. Dunn (resigned).*
(J. P. Maher resigned January 1943, and no new appointment made.)

PROVINCIAL GOVERNMENT REPRESENTATIVES

J. D. MILLAR,
Deputy Minister, Department of Highways

A. J. B. GRAY,
Deputy Minister, Department of Municipal Affairs

EXECUTIVE SECRETARY

MARTIN BALDWIN

ADVISORY TECHNICAL COMMITTEE

(appointed by the Board)

A. E. K. BUNNELL, Consulting Engineer (Convener)

A. S. MATHERS, Architect

S. R. FROST, Consulting Engineer

H. B. DUNINGTON-GRUBB, Lansdcape Architect

E. G. FALUDI, City Planning Consultant

L E T T E R O F T R A N S M I T T A L

CITY PLANNING BOARD

TORONTO

A. G. PARTRIDGE,
CHAIRMAN

THE GRANGE, DUNDAS ST. WEST
AD. 4388

MARTIN BALDWIN,
EXECUTIVE SECRETARY

F. J. Conboy, Esq., D.D.S., Mayor,
and Members of the City Council.

December 31, 1943.

GENTLEMEN:

The City Planning Board submits herewith its report for the year 1943, embodying the first stage of The Master Plan and supporting material. In doing so the Board desires to place on record its appreciation of the valuable assistance rendered by:

The Members of the Advisory Technical Committee
Members of the Street Naming Committee
Heads of Civic Departments
Toronto Transportation Commission
Toronto Harbour Commissioners
Councils and Officials of Adjacent Municipalities
Dominion Bureau of Statistics
Staff of the Planning Office
Canadian Hospital Council

and the Planning and Housing Agencies in New York, Boston, Philadelphia, Chicago, Buffalo, Detroit and other American cities, which have gone to considerable trouble to supply first-hand data, in respect to both completed and future projects.

In addition, special attention is called to the generous and public-spirited action of The Art Gallery of Toronto in providing admirable office space for the planning staff, free of charge.

The limited appropriation granted made it impossible to include in the report all the plans, graphs, etc., that are desirable to illustrate the various phases of Toronto's planning problem. Certain of the most essential are attached to the report, and arrangements have been made, again through the generosity of The Art Gallery of Toronto, to hold an exhibition for one month, commencing on January 6th, of all the plans and studies that have formed the background of The Master Plan. Members of the Board and the Advisory Technical Committee will attend during the exhibition to explain the material displayed to citizens and others interested. The Board is confident that in this way it can best satisfy public demand for authentic information.

The Board believes that The Master Plan herewith presented is well suited to fit in with a National Post War Construction programme to be financed jointly by the Federal, Provincial and Municipal Governments and submits that it is the most important matter to be dealt with by the City Council in 1944.

It cannot be too strongly urged that it be given early and constructive action, particularly with respect to securing at the forthcoming session of the Legislature the legislation necessary for its fulfillment.

In connection with the latter it is the opinion of the Board that the whole plan, with the exception of a few minor items, should be considered as being of general interest to the area and therefore not subject to the provisions of the Local Improvement Act.

The Plan as now drafted is intended to cover the requirements of the next 30 years, to be carried out as circumstances warrant and demand. It is not, however, static but must be held constantly under review for adjustment as changing conditions may justify.

Pending the adoption of the principles embodied in the plan no estimates of cost have been prepared.

Yours sincerely,

Signed—A. G. Partridge, *Chairman.*

T A B L E O F C O N T E N T S

Note:

The following appendices to the report submitted to Council are omitted:

Financial Statement for 1943
Draft Zoning By-Law as amended
Observations on Housing in Boston
Observations on Public Transportation in Boston
Public Transit in Chicago (Illustrated)
City Planning in Chicago

LIST OF ILLUSTRATIONS

SECTION I.—THE PURPOSE

IN the certain knowledge that Canada will continue to grow and prosper, and that Toronto will hold her place in the ranks of Canadian cities, the City Planning Board has prepared The Master Plan for the future growth and development of the City.

In this Plan the Board has provided for those amenities and conveniences, and has projected areas for work and living, which, in its opinion, will be required by all of the citizens in the future. The many specific undertakings proposed and recommendations made, have been designed to meet the City's requirements for the next thirty years. Of these many will be found to fit in with a Post War Construction Programme for public and private works.

In developing The Master Plan, the Board has considered carefully the growth of population, commerce and industry and the increase in area resulting directly from and essential to that growth, as well as many other influences which bear upon the problem. It has considered the changing modes of life of the people, the advancements in science, art and technology, and the most recent developments in vehicular and aerial transportation. Since none of these are static, The Master Plan has been conceived as a flexible instrument, designed to control and direct natural growth and development rather than to restrict or to prevent it.

At the outset, the Board perceived that the political boundaries of the city bear no relation to the social and economic life of its people. Since in a planning sense political boundaries have no significance, The Master Plan of necessity applies to and encompasses the whole of the future built-up area, of which Toronto is the centre and the most important part.

It was also apparent that since the City is for practical purposes built up, future growth must largely be accommodated in the vacant lands of adjacent suburbs, although any large increase in the population of the whole area must also result in an incidental but more intensive development within the boundaries of the City itself. The Master Plan is therefore an attempt to co-ordinate the physical development of the Metropolitan Area as one geographic, economic and social unit. The Plan, however, goes beyond the structural phases of land use, and the Board has had to give consideration to such matters as legislation, zoning, living conditions and all things affecting the welfare of the people.

The Master Plan, as now presented, embodies principles only, and does not portray the precise locations of the various features shown thereon. These can only be determined by an exhaustive technical study when sufficient funds and personnel are made available.

The Master Plan—*The coloured map at the end of this report illustrates in diagrammatic form, the main features of The Master Plan. It shows the limiting agricultural belt, the green belts, residential and other redevelopment areas, present and future industrial areas, rapid transit routes and main and distribution highways.*

SECTION II.—BASIC ASSUMPTIONS

PERIOD

Realizing that to plan for too long a period in the future might lead to visionary impracticability, and for too short a time would indicate lack of foresight, the Board has planned for the next thirty years' growth, or for one generation.

POPULATION

The conclusion has been reached that by the end of the period planned for, that is by 1974, the population of the Metropolitan Area will have increased from the present figure of about 900,000 to somewhere between 1,250,000 and 1,500,000. (*Ref. Section V–1.*)

AREA PLANNED

The area required to house and to provide for the commercial, industrial, social and recreational needs of such a population according to modern standards and varying requirements, is roughly 100 square miles. This is 45 square miles more than the present built up area of 55 square miles.

NEW AREA

With respect to the additional 45 square miles, the Board has adhered to the principal that new areas should be planned so as to provide for the development of fairly well defined districts, each equipped with its own employment opportunities, and other facilities for satisfactory living.

Population Density—*Map 1 at the end of this report shows diagrammatically the density and distribution of population in the Toronto area.*

SECTION III.—RECOMMENDATIONS

Upon the foregoing premises, the City Planning Board has formulated, submits and recommends the adoption now, of The Master Plan embodying recommendations for:

1. METROPOLITAN LIMITS

The fixing of the Limits of the Metropolitan Area of 100 square miles, as shown on The Master Plan; (*Ref. Section V–2*).

2. AGRICULTURAL BELT

The reservation of a broad belt of agricultural land, beyond and contiguous to the boundaries of the Metropolitan Area, by zoning or such other means as are available, to prevent straggling and irrational urban development; (*Ref. Section V–3*).

3. DRAFT ZONING BY-LAW

The immediate enactment by the City Council of the Draft Zoning by-law, as approved and amended by the City Planning Board; (*Ref. Section V–4*).

4. METROPOLITAN ZONING

The taking of immediate steps, in co-operation with the Province and the Suburban Municipalities, to apply the principles of Zoning to the whole Metropolitan Area, in substantial conformity with the proposals for land use embodied in The Master Plan; (*Ref. Section V–5*).

5. SUPERHIGHWAY SYSTEM

A system of limited access, high-speed superhighways of the dual type, connecting with the Provincial Highway System, to permit the rapid and unimpeded movement of vehicular traffic throughout the built-up area, as shown on The Master Plan and specifically as follows:

Superhighway A—generally across the waterfront, connecting the Queen Elizabeth Way to the new Kingston Road.

Superhighway B—commencing at Superhighway "A" in the vicinity of Strachan Avenue and running northward in the vicinity of Shaw and Crawford Streets, to a connection with a new provincial highway to the north country as shown on The Master Plan.

Superhighway C—commencing at Superhighway "A" in the vicinity of Coxwell Avenue and thence northerly in the vicinity of Craven Road, to connect with a proposed provincial highway direct to Peterborough and Ottawa.

Superhighway D—a by-pass route across the Metropolitan Area north of the present City Limits, to connect on the East with the new Kingston Road in the vicinity of Highland Creek and on the West with a proposed main highway junction on the Brown's Line in the vicinity of Malton, from whence a new direct provincial highway to Guelph, Galt and Kitchener is projected.

Superhighway E—a main crosstown distributing route, parallel to and in the vicinity of Bloor Street, Riverdale Avenue and Gerrard Street from Dundas Street to Main Street, with adequate connections to the Provincial Highway System East and West. (*Ref. Section V-6*)

6. RAPID TRANSIT SYSTEM

A system of rapid transit for public transportation facilities in the congested urban areas, comprising:

Firstly—a line starting north of Heath Street thence southerly in the vicinity of Yonge Street to Front Street; thence westerly under Front Street to University Avenue, thence northerly under University Avenue to Superhighway "E" and thence westerly on Superhighway "E" to Dundas Street;

Secondly—a line starting at Pape Avenue north of Gerrard Street and paralleling the C.N.R. right-of-way to Queen Street; thence westerly under Queen Street to Trinity Park and thence northerly along Superhighway "B" to St. Clair Avenue;

The construction of these lines will permit the removal of street cars and the substitution of bus lines for local services on main streets parallel to rapid transit lines and certain other street car streets. (*Ref. Section V-9*)

7. MAJOR HIGHWAYS

A system of internal highways as major traffic arteries, consisting specifically of:

(a) The Don Valley System connecting Bayview Avenue, Mt. Pleasant Road and O'Connor Drive to the waterfront, with an extension following the Belt Line Railway to the vicinity of Eglinton Avenue and Dufferin Street.

(b) Queen Street, widened to about 120 feet from the C.N.R. subway east of the Don to Gladstone Avenue, diverted north-westerly from Gladstone Avenue north of the present Queen Street and crossing High Park along its southern boundary and connecting to Queen Street west of the Humber.

(c) Eglinton Avenue—extended easterly across the Don and westerly across the Humber to connect with the Provincial Highway system.

(d) Newmarket and Sutton Road—an extension northerly from the intersection of Superhighways "C" and "D" to a connection at the Metropolitan Limit with an improved highway serving the east side of Lake Simcoe.

(e) Malton Airport Road—from the Lake front following the Mimico Creek north-westerly to Brown's Line and Malton Airport. (*Ref. Section V-6*)

8. ARTERIAL STREETS

Improvements in existing street systems as follows:

(a) Extension of Jarvis Street to Mt. Pleasant Road.

(b) Extension of Spadina Road by tunnel under the "Hill" to connect with upper Spadina Road and also to St. Clair Avenue and Bathurst Street.

(c) Extension of Dundas Street to the Kingston Road. (*Ref. Section V-6*)

9. LOCAL STREET ADJUSTMENTS

Correction of street jogs, elimination of grade crossings and minor street extensions at some 26 points to facilitate movement of traffic. (*Ref. Section V-7*)

10. PAVEMENT WIDENINGS

Improvement of traffic conditions on 62 miles of existing main streets by widening of existing pavements. (*Ref. Section V-8*)

11. STREET AMENITIES

(a) a programme of removal of overhead wires and poles and replacement of services below the pavement levels on all main streets.

(b) elimination of signs overhanging the public highway. (*Ref. Section V-13*)

12. INNER GREEN BELT

The establishment of an "Inner Green Belt" linking many blocks of park and undeveloped lands and following generally the valleys of the Humber, Black Creek and the Don, surrounding the present built-up area and served by a park road system. (*Ref. Section V-10*)

13. RECREATIONAL FACILITIES

Recreational areas consisting of local park and playground facilities and metropolitan park reserves, in accordance with local conditions and recognized standards of need. (*Ref. Section V-11*)

14. RESIDENTIAL REDEVELOPMENT AREAS

The designation of blighted residential areas in the heart of the City for demolition, replanning and redevelopment by both private and public means as shown on The Master Plan and consisting of an Eastern, a Western, and a Yorkville Area. (*Ref. Section V-12*)

15. PUBLIC HOUSING SITE

The designation of the area bounded by Parliament, Gerrard, River and Dundas Streets as a suitable site for an initial public low rent housing project. (*Ref. Section V-12*)

16. CIVIC CENTRE

The reservation of a large central area for a civic centre and in general comprising the land bounded by Queen Street, University Avenue, Dundas Street and Bay Street but retaining Osgoode Hall and the Registry Office as permanent features to be incorporated into the architectural ensemble of civic buildings and open plazas. (*Ref. Section V-13*)

17. PARKING LOTS AND DOWNTOWN SQUARES

The acquisition and use of suitable vacant lands in the downtown area for municipally owned or controlled off street parking facilities and for public squares and small parks. (*Ref. Section V-13*)

18. LEGISLATION

Legislative enactments:

(a) To prevent the sale or transfer of unsubdivided land for urban use by "metes and bounds". (*Ref. Section V-14*)

(b) To prevent premature subdivision of land. (*Ref. Section V-14*)

(c) To facilitate the marshalling of land and consolidation of sites for reconstruction purposes. (*Ref. Section V-12*)

(d) To permit the setting aside of 1 mill per annum of municipal taxes for permanent improvements exclusive of parks. (*Ref. Section V-14*)

(e) To require the dedication for park purposes, of not less than 5% of the land in any new subdivision, or other equivalent contribution. (*Ref. Section V-14*)

(f) To establish a setback line as a preliminary to the widening of commercial or industrial streets. (*Ref. Section V-14*)

(g) To provide for the establishment of municipal parking lots. (*Ref. Section V-13*)

(h) To permit the establishment of architectural control of the external design of all buildings, private and public. (*Ref. Section V-14*)

(i) To allot to cities and separated towns a fair proportion of the revenue from the gasoline tax and motor vehicle licence fees for highway and pavement improvements, traffic regulation and accident prevention. (*Ref. Section V-14*)

(j) To amend the City of Toronto Act 1937 (2nd Session) to increase the pavement width over which the cost of the work under the Local Improvement Act shall be borne by the Corporation from 28 feet to 32 feet. (*Ref. Section V-6*)

(k) To prevent the encroachment of buildings on the sites of projected streets. (*Ref. Section V-14*)

(l) To repeal By-law 2001 insofar as it applies to street widenings, openings and extensions, etc., designed for the benefit of the City at large.

(m) To relieve real estate of part of its present burden of taxation.

(n) To establish a Metropolitan Planning Authority. (*Ref. Section V-14*)

SECTION IV.—CONCLUSIONS

The Master Plan as outlined above is a challenge to the intelligence and resourcefulness of Torontonians. It is, in fact, a people's plan aimed at meeting the crisis created by the necessity of building a modern city on the framework of the old pre-machine age town. It proposes a programme of vast undertakings, but undertakings which in their purpose and magnitude are in scale with our own time and the future. Although the Board, at this stage, is not able to estimate the cost in dollars, it is satisfied that provided the Plan is approved and thus becomes the official plan, and wise counsel prevails in guiding its progress, less money will be spent and less taxes will be paid over the thirty year period contemplated, than if each of the thirteen municipalities within the Metropolitan Area continues to go its separate way.

Toronto has planned before, but as the enthusiasm that led to the plans died away, the plans were pigeonholed as unpractical dreams, and never have its people displayed the tenacity of purpose to look upon planning for what it undoubtedly is—the most valuable tool in civic development. Now, after a lapse of years, another start is made, but with infinitely greater difficulty due to the accumulated neglect of the intervening years.

If the decay which is eating at the heart of the City is to be stopped; if the City is not to be strangled by its own traffic; if children are to have safe and proper places in which to play, and if citizens are to live in convenient and congenial surroundings, planning must be made a continuing function of civic government, under a partnership of all the municipalities in the Metropolitan Area. Co-operation is of the most vital importance and urgency, for the future holds the choice of order or chaos. Only as Torontonians face the challenge and rise to their responsibilities will they make the vision of the Plan a reality—a City of beauty and cleanliness, of modern housing and modern recreational facilities, and of opportunity for all its people.

SECTION V.—AMPLIFICATION OF RECOMMENDATIONS

1. POPULATION STUDY

Table 2 appended hereto gives statistical data relative to the growth of population in the City of Toronto and its Suburbs with which it forms a Metropolitan Area. The facts thus illustrated while interesting from an historical viewpoint can, because of their great variation particularly in the suburbs, be of little value as a guide to future trends and recourse must be had to a consideration of the sources of population growth and their probable future effect upon existing conditions during the next generation.

The three factors contributing to population increase are:

Natural increase, that is, the surplus of births over deaths.

Immigration from overseas.

The net change due to domestic migration between urban and rural areas and different parts of the Dominion.

Overriding all of these is the manner in which they may be influenced by economic conditions affecting employment.

Natural Increase—Table 4 records a progressive decline in birth rate, especially during the recent depression, and a practically stable death rate. This coupled with the decrease in the percentage of persons in what will be the productive age, Table 3, during the next generation indicates that estimated population increase from this source should not be computed higher than 7.5 per thousand per annum.

Immigration—Table 5—a forecast in this regard is a matter of the greatest difficulty. While immigration from overseas proved an important source of population increase during the two decades following the year 1911 there was a marked falling off between 1931 and 1941 as the result of increased restrictions during the depression period. The loss of life during the war and the labour requirements for physical reconstruction in combatant countries coupled with a world-wide falling birth rate, seem to preclude the possibility of any very important increase from this source, but against this there is the possibility of considerable transfer of industry to this country from Europe and the desire of many to move to a country offering greater security and where food supplies are abundant.

Domestic Migration—The trend of migration to urban from rural areas may be considered to have become stabilised owing to the improvement of rural amenities and the extensive mechanisation of the farming industry. It is unlikely that urban areas in the future will be required to absorb more than the surplus from natural increase in rural areas.

Industrial—The possibility of the construction of the St. Lawrence Waterway in the near future will doubtless enhance Toronto's already assured position as an industrial and distribution centre.

Conclusion—After considering all factors discussed above it is estimated that the Toronto Metropolitan Area may anticipate a steady growth at the rate of approximately 10% to 15% during each of the next three succeeding decades and that on that basis the population of 1974 will be between 1,250,000 and 1,500,000.

TABLE 1.—

POPULATION OF TORONTO AND OTHER CITIES 1871-1941.

Year	TORONTO Population	Increase	Per cent Increase	Year	MONTREAL Population	Increase	Per cent Increase
1871	57,020			1871	130,833		
1881	81,372	24,352	42.7	1881	177,377	46,544	35.6
1891	170,651	89,279	109.8	1891	256,723	79,346	44.7
1901	205,857	35,206	20.6	1901	328,172	71,449	27.8
1911	374,667	168,810	82.0	1911	490,504	162,332	49.5
1921	522,666	147,999	39.5	1921	618,506	128,002	26.1
1931	627,231	104,565	19.6	1931	818,577	200,071	32.3
1941	655,751	28,520	4.5	1941	890,234	71,657	8.8
TOTAL		598,731	1,050.0	TOTAL		759,401	580.4
	HAMILTON				BUFFALO		
1871	26,880			1871	117,714		
1881	36,661	9,781	36.4	1880	155,134	37,420	31.8
1891	48,959	12,298	33.6	1890	255,664	100,530	64.8
1901	52,634	3,675	7.5	1900	352,387	96,723	37.8
1911	81,969	29,335	55.7	1910	423,715	71,328	20.2
1921	114,151	32,182	39.3	1920	506,775	83,060	19.6
1931	155,547	41,396	36.3	1930	573,076	66,301	13.1
1941	164,719	9,172	5.9	1940	575,901	2,825	0.5
TOTAL		137,839	512.6	TOTAL		458,187	389.3
	CLEVELAND				ROCHESTER		
1870	92,829						
1880	160,146	67,317	72.5				
1890	261,353	101,211	62.8				
1900	381,768	120,415	47.5	1900	162,608		
1910	560,663	178,895	46.9	1910	218,149	55,541	33.0
1920	796,841	236,178	42.1	1920	295,750	77,601	35.5
1930	900,429	103,588	14.5	1930	328,132	32,382	14.7
1940	878,336	−22,093	−2.4	1940	324,975	−3,157	−1.0
TOTAL		785,507	846.2	TOTAL		162,367	99.9

TABLE 2.—

POPULATION OF TORONTO AND ADJACENT MUNICIPALITIES 1901-1941.

Year	TORONTO Population	Increase	Per cent Increase	Year	ADJOINING MUNICIPALITIES Population	Increase	Per cent Increase
1901	205,857			1901	26,481		
1911	374,667	168,810	82.0	1911	30,394	3,913	15.0
1921	522,666	147,999	40.0	1921	81,192	50,798	167.0
1931	627,231	104,565	20.0	1931	180,798	99,606	123.0
1941	655,751	28,520	4.5	1941	235,927	55,129	30.5
TOTAL		449,893		TOTAL		209,446	790.0

METROPOLITAN AREA

Year	Population	Increase	Per cent Increase
1901	232,346		
1911	405,061	172,715	74.0
1921	603,858	198,797	49.0
1931	808,029	204,171	34.0
1941	891,678	83,649	10.0
TOTAL		659,332	352.0

TABLE 3.—

POPULATION OF TORONTO (CITY) BY AGE GROUPS AND PERCENTAGE DISTRIBUTION OF SEXES 1921-1941.

Age Group	No. of Persons of Both Sexes	Percentage of Age Groups: Both Sexes	Male	Female
1921				
0— 4.....	46,933	8.9	9.5	8.4
5—19.....	134,093	25.7	26.1	25.3
20—64.....	317,423	60.9	60.6	61.2
65 and over...	23,444	4.5	3.8	5.1
Totals.....	521,893	100.0	100.0	100.0
1931				
0— 4.....	45,244	7.2	7.5	6.8
5—19.....	156,842	24.8	25.4	24.2
20—64.....	394,598	62.5	62.2	63.0
65 and over...	34,523	5.6	4.9	6.0
Totals.....	631,207	100.0	100.0	100.0
1941				
0— 4.....	36,240	5.3	5.7	5.1
5—19.....	146,424	22.0	22.8	21.1
20—64.....	433,339	65.0	64.6	65.2
65 and over...	51,454	7.7	6.9	8.6
Totals.....	667,457	100.0	100.0	100.0

TABLE 4.—

TORONTO BIRTHS AND DEATHS 1921-1941.

Year	Total population	Births	Birth rate per 1,000 population	Deaths	Date rate per 1,000 population	Natural Increase	Natural increase per 1000 of total population
1921.....	522,666	13,976	26.8	5,867	11.2	8,109	15.5
1926.....	556,691	11,675	20.9	6,810	11.3	4,865	8.7
1931.....	627,231	13,320	21.2	7,474	10.8	5,846	9.3
1936.....	645,462	10,826	16.7	7,478	11.0	3,348	5.2
1941.....	655,751	12,316	18.8	8,093	12.3	4,223	6.4

TABLE 5.—

SOURCES OF INCREASE—CITY POPULATION 1911-1941.

Period	Natural Increase Births over Deaths	Increase from overseas immigration	Net change from immigration other than from Overseas	Net Population Increase
1911-1921.....	59,329	73,517	+15,153	147,999
1921-1931.....	63,306	83,431	−42,172	104,565
1931-1941.....	40,666	18,164	−30,310	28,520

SECTION V.—*Continued*

2. METROPOLITAN LIMITS

As pointed out in Section II.—"Area Planned", an additional 45 square miles, over and above the area of the City, and the built up sections of adjacent municipalities, comprising in all 100 square miles, will be necessary to provide accommodation for the anticipated new population. In arriving at the area required, the Board used as a standard the density of population existing in typical built-up suburban areas.

It seems obvious to the Board that these new areas should form a belt contiguous to and beyond the boundary of the existing built-up areas. A semi-circle with its centre on lower Yonge Street, and with a radius of approximately nine miles roughly encompasses this new Metropolitan Area. This will provide a symmetrical development

based upon Yonge Street as an axis. Existing road allowances and lot lines were followed for practical reasons in determining the boundary line as shown on The Master Plan.

The Municipalities, wholly or partly included in this area are the Townships of Scarborough, East York, North York, York and Etobicoke; the Towns of Leaside, Weston, Mimico and New Toronto; the Villages of Forest Hill, Swansea, Long Branch and the City of Toronto.

SECTION V.—*Continued*

3. AGRICULTURAL BELT

Great damage has been done to many cities by the subdivision and sale of land miles beyond any predictable need. Instead of a peaceful and prosperous countryside, where farm products and market crops are raised, the citizens find themselves surrounded by a no-man's-land little better than a desert of weeds. Ways and means must be found to prevent indiscriminate, unplanned and unwarranted subdivision of farm land with the attendant demand for schools, pavements and all city services.

Even when actual subdivision has not taken place, all land lying within reasonable reach of the city receives a speculative value, on the theory that development *may* come its way although in fact but little of it may be needed in any predictable time. In the hands of persons interested only in holding it for urban development, its real agricultural usefulness disappears.

The Board therefore recommends the reservation of a broad belt of agricultural land, beyond and contiguous to the boundaries of the Metropolitan area, by zoning or other available means, to serve as a barrier to the encroachment from without or the extension from within of irrational and unnecessary urban development.

This outer Agricultural Belt surrounding the Metropolitan Area is one of the most important features of The Master Plan. It should in general have a width of several miles, having due regard to existing organized communities. It should be permanently retained for agricultural use only. The basis of taxation, especially for school purposes will necessarily require adjustment downward from any existing semi-urban level of assessment.

SECTION V.—*Continued*

4. DRAFT ZONING BY-LAW

The Board has reviewed in detail the Draft Zoning By-Law referred to it by the Property Committee of the City Council and has held conferences with representatives of:

The Toronto Industrial Commission
The Canadian Pacific Railway
The Canadian National Railway
The Toronto Harbour Commissioners and
The Board of Trade

with particular reference to the classification of lands for industrial purposes.

As a result of the Board's review and these conferences, about fifty amendments have been made to the text and nineteen to the District Maps.

In practically all cases these amendments have been of a minor character, those in the text being very largely for the purpose of clarifying rather than altering the intent of the by-laws as prepared by the Independent Committee on Zoning. The Board is of the opinion that in its amended form it will be found reasonable and acceptable and recommends that any validating legislation necessary for its enactment be sought at the forthcoming session of the Legislature.

In view of changes which may result from the return to peacetime conditions and the implementation of The Master Plan the Board is further of the opinion that the whole by-law should be revised at the end of a three year period following its enactment but points out, to avoid any possible misunderstanding, that the contemplated review is not intended in any way to interfere with the right, as provided in the By-law, of any citizen or group of citizens to seek an amendment at any time.

SECTION V.—*Continued*

5. METROPOLITAN ZONING

In planning the undeveloped portions of the Metropolitan Area, the opportunity exists of working out in advance of development a street pattern modern in concept, with full provision for the safety and convenience of the people. Planning, however, includes more than the layout of streets. It should also include the uses of land to be served by the streets. Detailed planning of these undeveloped areas has not been attempted, nor is yet necessary, but the Board has indicated on The Master Plan in a general way two main factors which it deems worthy of consideration, as follows:

(1) The new areas should be developed largely on a basis of neighbourhoods, in which provision is made for shopping centres, education, recreation, as well as housing.

(2) Adjacent to these neighbourhoods or within easy reach, suitable land should be set aside for industrial use.

This concept of groups of neighbourhoods, with adequate space for industrial development which will provide a place for the worker in which he may earn his living and yet not be too far away from home, is a somewhat radical change from previously conceived ideas. To a large extent, we have hitherto felt that the worker may live in the suburbs but should work in the City.

The Draft Zoning By-law provides that a large area, in the southerly portion of the City and adjacent to the railways, now devoted to industry, shall be retained in this classification. It also provides a number of additional areas for new growth in the downtown industrial district. It should be pointed out, however, that there is a limit to the expansion of industry in the older and more developed areas of the City. Many industries find themselves cramped for space with inadequate provision for sidings and facilities for

expansion. In the main, these industries like to cover a large space of ground with one storey buildings, and designers favour this type for certain production processes. Such spaces are, in general, not available in the older portions of the city, or, if available, cost more than industry is willing to pay.

With these factors in view, the Board has suggested that several large areas in the undeveloped sections of the Metropolitan Zone be set aside so that they can be planned for industry. It will not be necessary to take this land out of its present agricultural use except when and as the demand for industrial development becomes apparent.

In order to implement this planned development of the Metropolitan Area, a uniform programme of zoning should be undertaken. As the new area is entirely outside the City Limits, the control is vested not in the City but in the adjacent Municipalities. Hence the Board has recommended that steps be taken in co-ordination with Provincial and Suburban Municipal Authorities to apply the principle of zoning to the whole Metropolitan Area in substantial conformity with the proposals for land use as embodied in The Master Plan.

Order and Beauty in Industry, Disorder and Decay in Housing—*The first illustration at the end of this report shows the effect of the intrusion of industry into a residential district. Even under the most favourable conditions the presence of industry destroys the residential character of the neighbourhood. The railway siding with its level crossing, the waste land and the nondescript stores to serve the industry, hasten the process of deterioration.*

SECTION V.—*Continued*

6. THE THOROUGHFARE PLAN

The street system of the City of Toronto may best be described as an irregular gridiron pattern of 66 foot streets which are quite inadequate to handle normal traffic requirements and which will become more so as time goes on.

The irregularity of the street pattern is without question a direct result of the lack of planning during the City's growing period and of fundamental irregularities in the original survey of the Township of York, which laid out 200 acre farm lots lying both east and west and north and south. The effect of the latter is important because of its influence on the direction of streets in subsequent development. For instance, in the area south of Bloor Street, the streets generally run north and south following the direction of the original farm lots while in North Toronto the reverse condition is found. In both cases the provision of cross streets has required municipal action.

Practically all of the main streets are required to carry street cars and, while certain of them have in the past been widened to increase their traffic capacity, to some extent easing the situation in critical locations, their frequent intersections and car stops militate against even reasonable speeds and are productive of most undesirable traffic congestion. In addition, much of their limited effectiveness is destroyed by the parking of vehicles along the curb.

Taking everything into consideration, intersections may be fairly characterized as the most important factor contributing to traffic delays, because firstly, taking a signal controlled intersection as an example, it is only open for traffic in any direction for thirty seconds in each minute and secondly, because of the lag in stopping and starting. The net result of this is to reduce traffic values by about 60% giving a six lane highway with frequent intersections about the same traffic carrying capacity as a two lane highway free from intersections. When to this is added the delay in loading and unloading street car passengers the effect of intersections on the City's street system becomes doubly apparent.

In viewing the general picture presented by traffic under normal conditions in 1939, the outstanding feature is the inadequacy of routes leading directly north from the business centre. Records show the average overall evening rush hour speed between the City Hall and the North City Limits to have been about twelve miles per hour regardless of route and in spite of the fact that the latter part of the journey was over improved highways. Speeds between King Street and St. Clair are recorded as considerably less. An analysis of this problem shows that to some extent it may be attributed to the disinclination of motorists to distribute along Queen Street and other east and west streets across the southerly part of the city, because of their unattractiveness from a traffic standpoint and the preference shown for the outlets leading northerly to other east and west distributional thoroughfares. This results in a left turn movement at College Street and University Avenue at times amounting to more than 25%.

The only route showing any of the characteristics of an efficient get-away street is that on the waterfront comprising Lake Shore Boulevard, Fleet and Keating Streets on which overall speeds of over 20 miles per hour between the centre of the City and the east and west City limits were recorded, but even this route will in the course of time become just another local commercial highway with all its attendant disabilities. Out-bound speeds on other routes were recorded as about 16 miles per hour.

After careful study of the records in the City Traffic Engineer's Office the Board reached the opinion that the general efficiency of traffic facilities within the city on the basis of 1939 volumes should be evaluated at about 30%. On that account and on account of additional population requirements and probable more intensive automobile use, provision should be made for an increase in main line traffic during the next 30 years of from 70 to 100 per cent. In this connection it may be noted that an increase in the per capita automobile use to the level that now obtains in certain American cities would alone place perhaps 80,000 more vehicles upon the City's streets.

In searching for a solution of the problem your Board became convinced of two fundamental requirements for

ideal mainline traffic routes, namely, the separation of Individual and Mass forms of transportation and the elimination of intersectional interference, but that, as a matter of practicability, such requirements could not be recommended except in the case of such thoroughfares as could be fairly considered the backbone of the whole street layout providing the main connections between the City and the Provincial Highway System. These conclusions were confirmed by study on the ground of the superhighway and rapid transit systems in Boston, New York, Philadelphia, Chicago and Detroit.

The Board therefore recommends as a 30 year highway construction and improvement programme the superhighway and rapid transit system detailed in Section III of this report together with certain other new and improved thoroughfares set out therein. It is the Board's opinion that the completion of this programme with the local street adjustment and pavement widenings, also detailed, will make satisfactory provision for the anticipated increase in traffic requirements. In addition, it will tend to divert through traffic into main channels, thus counteracting the present dangerous habit, to which a gridiron plan lends itself, of seeking new and more speedy routes through residential areas on streets designed for local traffic only.

By way of further explanation of the detailed recommendation the following comments are submitted.

GENERAL

(a) The various features as shown on The Master Plan must be considered diagrammatic only, precise location having been impossible with the time and funds at the Board's disposal.

(b) The programme is intended to cover a period of 30 years and no priority rating for actual construction has yet been set up.

SUPERHIGHWAY "A"

Designed to provide a direct express connection between the City's waterfront and the Provincial highway system having in mind the very greatly increased importance of the City as a distributional centre that will follow the construction of the St. Lawrence waterways proposals.

SUPERHIGHWAY "B"

The Provincial Highways Department has found itself compelled to contemplate supplementing Yonge Street and Brown's Line as main highways to Northern Ontario at some future time, by the construction of a new cross-country highway. Superhighway "B" is designed as a southerly continuation of the proposed new route.

SUPERHIGHWAY "E"

Traffic studies indicate the urgency of an express crosstown route that will eliminate the points of heavy intersection congestion occurring on Bloor Street and other east and west streets. It is proposed that this highway shall be fully grade-separated, with the provision of sufficient access points to connect with the existing street system.

Maximum Traffic Flow—*Map 30 at the end of this report shows by the thickness of the lines, the comparative volume of motor traffic on Toronto streets at the evening rush hour.*

Davison Limited Access Highway, Detroit, Michigan—*The second illustration at the end of this report shows the main features of a grade-separated dual highway for high-speed traffic. No pedestrian traffic has access to the highway. Local traffic is handled on parallel surface streets and cross traffic on bridges. Through traffic enters and leaves the express lanes by means of ramps from four to six blocks apart.*

QUEEN STREET WIDENING

This street, paralleling as it does, the City's principal industrial area is designed to serve as a main distributor for the abutting districts with the additional purpose if constructed on generous lines of providing a downtown street that has distinction. This improvement, with the re-alignment of the pavement on University Avenue and the establishment of a Civic Square as recommended in this report, will give to the heart of the City a dignity befitting the Capital of the Province that it has never before posessed.

EGLINTON AVENUE

The usefulness of this thoroughfare, which in the future will occupy a strategic position for local communication between the component parts of the Metropolitan Area, is at present largely nullified by its termination at the Don and Humber Rivers.

SPADINA ROAD AND AVENUE

Spadina Avenue, by reason of its width below Bloor Street and its location, is admirably situated to carry an important share of north and south traffic and to act as a direct relief to Avenue Road and Bay Street. A tunnel is contemplated under the "Hill" north of Davenport Road.

JARVIS STREET EXTENSION AND DON VALLEY ROADWAYS

The lack of any adequate north and south route between Yonge Street and the Leaside Bridge, a distance of over two miles, should be corrected. These two roads because of their different final destinations cannot be considered duplicates.

SECTION V.—Continued

7. STREET ADJUSTMENTS

A study of the existing street system indicates certain points where normal movement is interfered with by local physical conditions causing delay, congestion and increased traffic hazards. Their correction as listed below is recommended for post war action as part of The Master Plan.

INTERSECTION JOGS

Annette Street at Keele Street.

Lansdowne Avenue at Bloor Street.

Dovercourt Road and Oakwood Avenue at Davenport Road:

Dupont Street and Van Horne Street at Ossington Avenue.
Dundas Street at Bathurst Street.
Spadina Avenue and Spadina Road at Bloor Street.
Hoskin Avenue and Harbord Street at St. George Street.
St. George Street and Beverley Street at College Street.
Roxborough Street and Dupont Street at Avenue Road.
Dupont Street at Kendal Avenue.
Dundas Street at St. Patrick Street.
University Avenue and York Street at Front Street.
Gerrard Street at Parliament Street.
Front Street and Eastern Avenue at Trinity Street.

RAILWAY GRADE CROSSINGS

Pape Avenue and C.N.R.
Jones Avenue and C.N.R.
Greenwood Avenue and C.N.R.
Woodbine Avenue and C.N.R.
Dufferin Street and C.P.R.
Bartlett Avenue and C.P.R.

MINOR STREET EXTENSIONS, ETC.

Duplex Avenue connection north of Glenview Avenue.
Duplex Avenue and Jedburgh Road connection at Woburn Avenue.
Keele Street and Weston Road connection at McCormack Avenue.
Eastwood Road diversion at Kingston Road.
Dundas Street easterly, by connecting existing streets.
The connection of River and Carlton Streets.
Lake Shore Boulevard straightening between Dunn Avenue and Jamieson Avenue.
Annette Street diversion at Dundas Street.
Lake Shore Boulevard re-alignment east of the Humber River.
Eastern Avenue extension to Kingston Road at Edgewood Road.

THROAT WIDENINGS

Highland Avenue at Glen Road.
Poplar Plains Road at St. Clair Avenue.
Bedford Road at Davenport Road.
Bedford Road at Bloor Street.

SECTION V.—*Continued*

8. PAVEMENT WIDENING

While the future of Toronto as a great metropolitan centre demands the progressive construction of the superhighway and rapid transit programme embodied in The Master Plan herewith submitted, consideration must also be given to the immediate necessity of improving traffic facilities and the opportunity that will exist of so doing in the immediate post-war period. The fact that the area of the City devoted to public highways amounts to only 22% as compared with about 30% in comparable American cities indicates that traffic difficulties particularly in the down-town area may, with considerable justification, be attributed to the simple fact that pavements generally are not sufficiently wide to carry the load placed upon them and at the same time provide storage space at the curb for vehicles parked for short periods during the transaction of business. The facilities required on a residential street for safety and convenience, are two 9 foot traffic lanes and two parking lanes. This is obviously impossible on the majority of such streets, the pavements of which are now 28 feet or less in width. Experience indicates that the minimum desirable width for a pavement is 32 feet and that sound argument exists for an increase in this minimum width to 36 feet. Where other than local traffic is to be accommodated additional 9 foot traffic lanes should be added. Using this formula it will be seen that for ordinary city streets standard pavement widths should be a minimum of 32 feet, 41 feet or 50 feet to provide 2, 3 or 4 uninterrupted traffic lanes as may be required. For pavements on which buses operate or where traffic is permitted to move at more than city speed, the lane width will require to be increased, if safety and freedom of movement are to be assured. On car line streets the minimum pavement width which will provide for the safe uninterrupted movement of free wheel traffic is 50 feet.

***Adequate Pavement Widths**—Map 4 at the end of this report shows the existing pavements that may be considered adequate in accordance with these standards and provides a striking illustration of one of the reasons for traffic delay and congestion. The correction of this situation by means of a systematic programme of pavement widening is recommended as follows:*

(a) That all pavements less than 46 feet in width carrying street cars be widened to 50 feet with the exception of:

Spadina Avenue between Spadina Crescent and Bloor Street which should be widened to 70 feet.

Mount Pleasant Road between St. Clair and Eglinton Avenues which should be widened to 54 feet.

Those from which street cars will be removed as a result of the construction of a rapid transit system.

Any section where the consequent narrowing of the sidewalk is impracticable.

(b) That the pavements on the streets listed in groups "A" and "B" below, which, because of location, serve as important links in the City Highway System, be widened or realigned as indicated.

***Proposed Pavement Widenings**—Map 5 at the end of this report shows, in black, streets where pavements require widening for use as distribution streets.*

Group "A" should be given priority over group "B".

GROUP "A"

		PRESENT WIDTH	PROPOSED WIDTH
Keele St.	Bloor St. to Annette St.	22	46
Mavety St.	Annette St. to Dundas St.	24	36
Dowling Ave.	Queen St. to Lakeshore Blvd.	20	36
Jamieson Ave.	Queen St. to Lakeshore Blvd.	20	36
Gladstone Ave.	Queen St. to Peel Ave.	24	46
Peel Ave.	Gladstone Ave. to Dufferin St.	24	46
Dufferin St.	Peel Ave. to North City Limits	24	46
Oakwood Ave.	Davenport Rd. to St. Clair Ave.	24	46
Spadina Rd.	Bloor St. to Dupont St.	24	50
Beverley St.	Grange Ave. to College St.	24	46
University Ave.	Realignment Queen St. to North Limit of Queen's Park		
Avenue Rd.	St. Clair Ave. to Lonsdale Rd.	24	50
Lonsdale Rd.	Avenue Rd. to Oriole Parkway	24	50
Oriole Parkway	Lonsdale Rd. to Kilbarry Rd.	28	50
Mt. Pleasant Rd.	Wanless Ave. to Teddington Pk. Ave.		46
Jarvis St.	Queen St. to Bloor St.	36	50
River St.	Queen St. to Gerrard St.	18	46
Carlaw Ave.	Keating St. to Browning Av.	24	46
Woodbine Ave.	Keating St. to Kingston Rd.	24	46
	Gerrard St. to N. City Limits	24	46
Millwood Rd.	Mt. Pleasant Rd. to Bayview Ave.	28	46
Davisville Ave.	Yonge St. to Bayview Ave.	28	46
Royce Ave.	Emerson Ave. to Lansdowne Ave.	24	46
Wilton Square	Yonge St. to Victoria St.	30	46
Louisa St.	Yonge St. to Elizabeth St.	30	46
Richmond St.	Spadina Av. to Niagara St.	24	46
	Leader Lane to Don River	42	50
Eastern Ave.	St. Lawrence Ave. to Don River	28	50
Lakeshore Blvd.	Realignment Dunn Ave. to Jamieson		60
Cherry St.	Eastern to Front St.	28	46
Donlands Ave.	Danforth to N. City Limits	28	46

GROUP "B"

Lansdowne Ave.	Queen St. to Dundas St.	20	36
Shaw St.	Dundas St. to Davenport Rd.	24	36
St. George St.	College St. to Bloor St.	30	46
Pleasant Blvd.	Yonge St. to St. Clair Ave.	24	36
Cambridge Ave.	Danforth Ave. to Chester Hill Rd.	24	36
Chester Hill Rd.	Cambridge Ave. to Broadview Ave.	28	36
Broadview Ave.	Browning Ave. to Fulton Av.	22	50
Leslie St.	Eastern Ave. to Gerrard St.	24	46
Hoskin Ave.	St. George St. to Queen's Park	30	46
Wellesley St.	Jarvis St. to Sumach St.	24	46
Duchess St.	Jarvis St. to Parliament St.	30	46
Duke St.	Sherbourne St. to Parliament St.	28	46
Wellington St.	Portland St. to Strachan Av.	20	46
John St.	Front St. to Grange Ave.	24	46
Grange Ave.	John St. to Beverley St.	24	46
Lawrence Ave.	Yonge St. to W. City Limits		
Dovercourt Rd.	Sudbury St. to College St.	24	36
Sudbury St.	King St. to Dovercourt Rd.		36
Sorauren Ave.	Queen St. to Dundas St.	24	36
Duplex Ave.	Chaplin Cres. to Glenview Ave.	28	36
Alvin Ave.	Heath St. to St. Clair Ave.	24	36
Heath St.	Alvin Ave. to Yonge St.	24	36
River St.	Gerrard St. to Spruce St.	18	36
Spruce St.	Sumach St. to River St.	18	36
Sumach St.	Spruce St. to Wellesley St.	24	36
Greenwood Ave.	Queen St. to N. City Limits	24	46
Southwood Rd.	Williamson Rd. to Kingston Rd.	28	36
Williamson Rd.	Southwood Rd. to Wineva Ave.	24	36
Wineva Ave.	Williamson Rd. to Hubbard Ave.	24	36
Chaplin Cresc.	Yonge St. to W. City Limits	28	46
Browning Ave.	Broadview Av. to Pape Av.	28	46
Eastwood Rd.	Coxwell Av. to Kingston Rd.	24	46
Dundas St.	Broadview Ave. to Boulton Ave.		36
Roxborough St. E.	Yonge St. to Wrentham Pl.	24	36

SECTION V.—*Continued*

9. RAPID TRANSIT

It is the considered opinion of the Board that the time has arrived for the inauguration of a programme of construction for Rapid Transit or independent rights-of-way for mass transportation, beginning with the most congested routes and extending to others as conditions warrant.

In stating the reasons for the inclusion of Rapid Transit proposals in The Master Plan, it is unnecessary to describe the sluggish movement of fixed rail and free wheel vehicles on rush hour routes leading into and out of the central business area. That is only too well known. Nor is it important to discuss the conflicting opinions as to

whether street cars delay automobiles or vice-versa. Whatever the conclusions reached, the simple facts remain, that there are too many intersections, the loading and unloading of street cars cause too much delay and the streets are too narrow to permit the satisfactory movement of mixed traffic. All these things combine to prevent the provision of speedy and efficient transportation for that large part of the City's traffic that daily requires to move in and out of the area.

The conditions now experienced and the certainty that they will grow worse, demand some fundamental change that will give direct relief to those persons who must rely on public transportation for their daily comings and goings.

The problem of crowded street cars and massed automobiles all travelling at an overall speed of about six or seven miles per hour on the principal central thoroughfares, cannot be solved by the addition of more street cars on the same or even parallel routes. There is not enough street space available. Buses cannot be used as substitutes for street cars, as may be done in small cities. The large number required due to their smaller carrying capacity, would impose demands on street space comparable to that vacated by the street cars, in addition to involving loading delays and greatly increasing the hazards of vehicle movement on narrow streets.

From a study of the plan of the City with its man-made and natural barriers to free traffic movement, it will be evident that it is not the size of a city alone that justifies and determines the need for rapid transit. Equally, if not more important, are the pattern of its street system and the geographic and topographic features leading to bottlenecks and congestion that at times verges on stagnation.

The direct advantages of a Rapid Transit System which may take the form of subways, depressed or elevated rights-of-way, are two-fold. It not only relieves mass transportation from the retarding effect of intersections and other traffic, but also greatly benefits other traffic to the extent to which the removal of the street cars increases the street space on main surface routes available for other purposes, and enables that space to be used more efficiently.

It is a practical answer to the basic traffic engineering principle—that a mixture of traffic of varying speeds and types on the same street is destructive to highway efficiency. A Rapid Transit System is, in the long run, the cheapest and most efficient way of piercing the blanket of traffic congestion that surrounds and overlays the central business area.

As the system develops, it is predicted that its operation will further increase the fluidity of movement on downtown streets to the extent to which its patrons will either park their cars at the rapid transit terminals, or if within walking distance of the system, give up the daily use of automobiles altogether in favour of the cheaper, equally fast and certainly less hazardous trip by rapid transit. In the city of Boston, which pioneered in rapid transit, and other American cities, terminal parking facilities are an important adjunct of the rapid transit system.

It will be noted that the system as designed, provides direct connections between the centre of the city and the focal points for mass transportation, such as—St. Clair and Yonge Streets, Bloor and Dundas Streets, and Queen Street and Broadview Avenue.

The Board concurs in the Rapid Transit proposals put forward by the Toronto Transportation Commission in January 1942, for the construction of a north and south line in the vicinity of Yonge Street between Heath Street and the Union Station, and an east and west line following Queen Street from Trinity Park to the Don River, and also approves the further proposals of the Commission in its letter of November 30, 1943 to construct three additional lines, of which two are located in a widened central boulevard between the dual roadways on Superhighway "B" in the vicinity of Shaw and Crawford Streets and Superhighway "E" paralleling Bloor Street, and the third under University Avenue, between the Union Station and Bloor Street. The text of the Toronto Transportation Commission's letter will be found in Appendix 3.

The purpose of the University Avenue line is to provide part of a very valuable rush hour route to the west which could not be accommodated by the Yonge Street line. In conjunction with that line it is needed to meet the heavy demands for rapid and convenient transportation in the central urban sections arising from the fact that in the area south of Bloor Street between St. George and Beverley Streets on the west and Church Street on the east, are to be found the City's chief financial, commercial and retail districts, the principal hotels, the City and Provincial administrative centres, the University, eight public hospitals built or building, three sports arenas, the principal concert halls, theatres, etc. This limited area contains the business and social heart of the City.

The construction of the system will, as it proceeds, permit the progressive removal of street cars from Yonge Street, Bay Street, Avenue Road, Queen Street and other thoroughfares and the substitution of buses for local service.

It is the opinion of the Board that the operation of a Rapid Transit System will enhance the values of downtown real estate.

SECTION V.—*Continued*

10. THE INNER GREEN BELT

The outer metropolitan areas, providing for a future population of 450,000 should be separated from the inner city, already mostly built up, by a belt of green open space. Toronto possesses a priceless heritage in its magnificent ravines, which closely skirt the boundaries of the present built-up area of the City and its suburbs and almost completely enclose it. From a point well east of Dentonia Park the east and west branches of the Don River form one continuous ravine as far west as the intersection of Wilson Avenue and Bathurst St. A short distance over the level from this point lies the Black Creek

Valley which, together with the lower reaches of the Humber, completes the encirclement of existing Toronto.

This fortunate disposition of ravines makes possible an encircling Inner Green Belt of public park land so situated as to be within reasonably easy access, not only of Toronto's existing population on the inside, but also of this proposed outer Metropolitan Area on the outside which is planned to accommodate a population of 450,000. The Inner Green Belt should extend the full width of each ravine forming a part of it, from the top of one bank to the top of the other.

The people of the City have for many years, flocked to these ravines for recreational purposes, showing how much they appreciate what remains of Toronto's former original natural beauty. They continue to do so in spite of dumps, destruction of trees, and the erection of ugly buildings. Many of Toronto's most valuable ravines show evidence of vandalism. This damage is cumulative. A stop must be put to it at once. Delay will be fatal. It is suggested that, as a first step toward public acquisition, all the ravines should be zoned for agricultural purposes only, the destruction of trees prohibited for all time, and no dumping, grading or filling allowed.

Many narrow ravines have been filled in and obliterated, in order to create a commercial value. Wide ravines with bottom flats have a grazing value and a potential building value although they are really unsuitable for residential purposes. Apart from their use as public parks the actual value of the ravines is very small. It should be possible to acquire them at a reasonable cost. The removal of the C.N.R. from the Don Valley is desirable and seems practicable. Where the green belt crosses level land, purchase seems to be the only feasible method.

A conception of this green belt as a parkway in the usually accepted meaning of the term is foreign to this report. It should not be used by any through traffic. Travel through the green belt, should be at slow speed by winding roads attractive only to those persons who wish to visit the ravine parks for their own sake.

Branching out from this green belt itself are a number of other ravines of different sizes and lengths which now form natural barriers between various sections of the urban area. As these ravines are mostly narrow, many of them still unspoiled, undeveloped and unbuilt, their acquisition as a most valuable addition to Toronto's park system is recommended.

The Board's recommendation for the establishment of the green belt, and its subsidiary ravines, has two purposes. In the first place they are to act as barriers between residential and industrial districts, and to break up residential parts of the City into well-defined separated neighbourhoods, arresting the spread of continuous bricks and mortar to uncontrolled limits. In the second place they are the principal open spaces of the city for both passive and active recreation. Their fortunate disposition makes possible the development of a park system second to none so distributed as to give the greatest accessibility to all the citizens, whether living within or without the green belt.

In this park system should be found accommodation for every age group and every relaxational taste in the City, whether it be active sports such as golf, softball or tennis, or the passive enjoyment of picnicking in the unspoiled natural scenery of valley, river, and wooded hillside.

SECTION V.—*Continued*

11. PARKS AND PLAYGROUNDS

In the desperate struggle of most cities to keep down taxation, while still balancing the budget, the refusal to spend public money on such apparently unprofitable amenities as playgrounds, parks and gardens is understandable. More industry and commerce, rapid increase in population, and greater density of building seem, at first glance, to be the obvious way of increasing the whole structure of taxable wealth. The conception of the City as a delicate living organism with a body that can be starved and a spirit that can be broken comes to be overlooked. Instead of keeping pace with the expanding City, expenditure on the acquisition and development of public open space, came almost to an end in Toronto many years ago.

It is true that some people, thinking only in terms of living where employment can be found, are prepared to put up with any conditions. It is no less true, however, that, if the few small parks and playgrounds upon which citizens depend for their own relaxation, and the health of their children, were to be covered by factories, bricks, and mortar, large numbers would be looking for a more desirable city in which to raise their families.

If Toronto were in possession of anything resembling the delightful riverside and canalside promenades and parkways of Ottawa, its popularity as a city in which to live, its appeal to visitors and to enterprising people trying to decide where to locate their business, and the taxable value of the whole of its real estate, would be enormously enhanced. Over-emphasis on the purely commercial outlook defeats itself. It must result eventually, not in an increase in wealth but in decay. Prosperity is created, not only by industry and commerce, but also by a happy, healthy and contented population enjoying all the amenities that city life can provide. Many cities have found that a well laid out park is an insurance against depreciation in neighbourhood values.

CLASSIFICATION

Recreational areas fall into two main groups:

Local facilities required to satisfy the needs of each city district. These will include the following:

a. Playlots for small children of 3-5 years old.
b. Playgrounds for children 6-14 years old.
c. Playfields for young people of 15-24 years old.
d. District parks for all ages.

Metropolitan facilities for the population of the city and its suburbs as a whole.

a. Open spaces such as city squares, and small public gardens. Their value will be chiefly decorative.

b. Public golf courses, zoological and botanical gardens.
c. Park belts with park roads for pleasure driving.
d. Large parks within the urban region.
e. Regional recreational parks beyond the suburbs.
f. Forest reserves within easy driving distance.

STANDARDS

It is necessary in arriving at Park requirements for Toronto to determine some standard which is related to its special conditions. We understand the aim has been to obtain 5% of the City's total land area for local parks and although progress has been made, even this small proportion has not yet been acquired.

A more equitable standard would, however, take into consideration the needs of the population according to its density and age levels. The Table appended below is a preliminary study of this problem and is based on various standards set up by planning bodies and research agencies in Great Britain and the United States correlated to Toronto's local conditions.

Still further study is required before these tentative standards can be applied and the question of the distribution and locations of park areas and of their acquisition also requires much detailed study and the utmost co-operation of all concerned. This is one of the major items for consideration by the Board in 1944.

DISTRIBUTION OF RECREATIONAL FACILITIES IN TORONTO

Neither political wards nor existing school subsections serve the purpose of a subdivision of the City area into recreational districts. An effective subdivision for this purpose can only be based upon such artificial and natural barriers as traffic thoroughfares, railways, factory districts, rivers and ravines. It ought to be possible for every child to reach its play area and school without crossing dense traffic or finding its way through factories.

Tentative proposals for the location of such barriers appear on the plan, making possible a logical division of the City into large districts, a subdivision of these into neighbourhoods, and a still further break-down into precincts. Until the proposed location of these traffic arteries receives official recognition it is impossible to deal with the distributional aspect of the recreational needs of the City.

The acquisition of suitable recreational sites in the built-up residential sections of the City will not be easy. In areas where living conditions are favourable, home facilities for recreation may be more adequate and transportation possibilities to green belt, park, and open country more likely so that this residential class may be satisfied with somewhat lower standards than the others. There will, however, be a demand for a distribution of playfields, tennis courts and skating rinks. In areas where living conditions are showing the first signs of impairment, full standard facilities will have to be found by purchase and development.

The provision of the recreational needs of "redevelopment areas" may be the least difficult of all three classes. As redevelopment means entire replanning of the whole area including the street pattern a distribution of buildings and open spaces along the most modern lines becomes possible.

Classification	Unit Size	Requirements on Population Basis
Playlots 0-4 yrs.	2,000 to 10,000 sq. ft.	4,000 sq. ft. per 100 families
Playgrounds 5-14 yrs.	1¾ to 3 acres	1 acre per 1000 children 5-14 years
Playfields 15-24 yrs.	20 to 30 acres	1 acre per 1000 of total population
District Parks All ages	10 to 15 acres	½ acre per 1000 of total population

Area to be Served	Standard Requirements for City	Existing in City	Required for City
One Block	70 acres	None	70 acres
About ⅓ sq. mile	103 acres	44 acres	59 acres
About 2 sq. miles	650 acres	177 acres	473 acres
About 2 sq. miles	325 acres	255 acres	70 acres
	1,148 acres	476 acres	672 acres

SECTION V.—*Continued*

12. RESIDENTIAL AREAS AND PUBLIC HOUSING

With the exception of the old Town of York, traces of which are still discernible in the downtown area, the present plan of Toronto is a gridiron pattern of streets, laid out by land speculators within the framework of the original rural concession and side roads, and designed simply for the purpose of providing access to the maximum obtainable number of house lots. This pattern has been extended in the same manner as each splurge of residential building has taken place, and always the newest of these has been a suburban development, with town on one side and country on the other.

Meantime, with the growth of the central commercial area and industrial areas along the railway lines, commerce and industry have invaded the older residential districts crowding buildings and activities on properties whose dimensions were established on the basis of residential use only. Furthermore, the expansion of these non-residential land uses has not been uniformly undertaken, and very many instances occur where business has moved in on built up residential streets, purchasing one or two properties and erecting factory structures in the midst of the houses.

On the other hand, it is true that many industrial and commercial properties, originally established outside the town, were eventually surrounded by houses as the City grew.

In examining the older residential areas and attempting to determine the real reasons for their decline in value and desirability, certain basic deficiencies in amenity and many detrimental influences can be found.

First, there is the depressing effect which the presence of industrial and commercial establishments has upon surrounding residential property. This is so obvious as to require no elaboration here.

Second, the very important amenity, temporarily provided by open country adjoining suburban developments, disappears and is automatically lost as the City becomes built up beyond them. Since no substitute for it was provided in the plan of subdivision, its disappearance automatically deprived such areas of something of great value, upon which the purchasers of new houses had instinctively counted.

The rapidity with which modern residential areas have declined in value partly on this account, is well demonstrated in the Toronto area, where land values have repeatedly begun to drop by the time a given subdivision has been three-quarters built up.

Third, the old residential districts have progressively declined in value as residential areas, as the buildings in them have become old fashioned and worn out, and general dilapidation has set in.

Subdivisions and Neighbourhoods—*Map 9 at the end of this report contrasts existing methods of subdivision for residential building with the possibilities of a planned neighbourhood on the same area, with parks, schools, churches, amusement and shopping centres included in the design.*

Whatever may have been the charms of the residential areas south of College Street when they were suburbs almost a century ago, there is no doubt that in this respect they have been surpassed by the newer developments in the present suburbs. Property owners in this old part of Toronto who use their properties for their own residences, have witnessed a steady decline in neighbourhood amenity and saleability, due to age, obsolescence, actual physical dilapidation and the encroachments of commercial and industrial land uses. They have also discovered that the maintenance of their properties has become increasingly heavy and that rebuilding has been made virtually impossible by the general reluctance of mortgage companies to lend on residential securities of any kind in other than the newer parts of the City.

Attempts to sell have either been abortive or have been successful at prices which are roughly equivalent to the assessment on the land. While sales are occasionally made to purchasers who intend to utilize the property for other than residential purposes and in some instances to builders who intend to erect low cost multiple family dwellings, the whole area by and large is rapidly degenerating into actual dilapidation.

Unless some steps are taken to reverse the present trend the processes of decay must inevitably result in wholesale demolitions and consequent loss of taxable assets to the municipality.

If demolition of worn-out buildings is to be permitted to take its normal course, which is a hit or miss affair with here and there the appearance of vacant lands, the process of haphazard rebuilding will never recreate a brand new development over any sizeable area. The best that can be expected under such conditions will be a hodge-podge programme of reconstruction with slum industries, and slum houses hopelessly mixed with a spattering of new duplexes, bungalows, small apartments and patched over dwellings, and the whole thing superimposed over an area which is equipped with antiquated educational buildings, inadequate park and recreational facilities and a horse and buggy street system. The progress of blight will no doubt be retarded but the sources of the disease will remain to infect not only these areas but the surrounding areas as well.

Neither the plan of the City nor the design and construction of its residential buildings have in the past been considered as accessories of a permanent urban community, but only as a means for the enrichment of the land speculator. This phase of the City's growth was perhaps an essential to its former status of a frontier town, but the time has surely come when, in the period of its first reconstruction, other values should be considered and other objectives made the aim of its citizens. Certainly every effort should be made in rebuilding the older residential areas, to create such conditions of plan and to provide such permanent amenities as will create a residential character of the most modern type quite the equal of, if not superior to that pertaining in the newest suburban areas. For, if the City is to maintain its public services on any satisfactory basis, its residential areas should pay their share of the cost. To do so they must be sufficiently attractive to retain within the City's borders those elements of the residential population which can pay taxes on an adequate scale, for it is people who pay taxes, not buildings.

Obviously it would be futile to suggest a type of redevelopment which does not bear an economic relationship to present land values and assessments. In the older areas, land apart from buildings is held at prices vastly in excess of those currently paid by builders for vacant land in the suburbs. If the values of these central properties are to be retained at anything near their present assessments, it is obvious that redevelopment on the basis of private detached dwellings is out of the question, and that duplex houses and other multiple family dwellings should be permitted in the greater part of these areas. The Draft Zoning By-Law as amended and approved by the Board provides for this kind of development, and in this it is believed there will be general public approval. However, merely to permit the building of new residential buildings on the existing street pattern and as a patchwork programme applied to the present situation, is to fail to create the attractive surroundings which are essential, if these areas are to compete with the new areas on the outskirts. Re-

construction must therefore consist in, firstly, the clearing out of the existing buildings and non-conforming land uses—not only the old houses; secondly, the redesign of the street plan to eliminate through traffic and to provide adequate amenities in the form of parks and children's playgrounds, and thirdly, the re-building of the whole area complete with new houses, schools, shopping and entertainment facilities, new recreation facilities, libraries, etc. In fact, totally new and modern neighbourhoods designed for modern urban life must be the objective of the whole reconstruction undertaking.

Obviously this objective cannot be obtained by individuals on their own resources, but only by the community as a whole. The practical job of demolition and replanning requires that all of the property be purchased by public agencies, presumably by the municipality, aided financially by Provincial and Federal Governments. The job of rebuilding is largely a matter for private enterprise although public housing for the depressed economic classes should undoubtedly have a place in any such programme.

The Board this year, has made a survey of the older residential areas, and has indicated on The Master Plan, the general location and approximate boundaries of those which it believes to be in need of replanning and reconstruction. Of these blighted residential areas the Board selected one section for detailed study; viz: the area bounded by Parliament, Carlton, River and Queen Streets.

Since this area with only a few minor exceptions has been classified for residential use in the Draft Zoning By-Law, the Board's studies have been based upon the assumption that redevelopment of the area should be along residential lines.

The problem of traffic diversion was therefore given first attention and the Board in its suggested scheme has provided for the extension of Carlton Street easterly from Parliament Street, to Sumach Street thence skirting the edge of Riverdale Park to a junction with Gerrard Street at River Street. This with the suggested widening of River Street from Queen Street to Gerrard provides a boundary ring of adequate traffic streets around the area, which permit the closing of Sumach and Sackville Streets to through north and south traffic.

The proposal also permits the Carlton Street carline to continue eastward on Carlton Street, leaving Gerrard Street free for motor traffic and Dundas Street as the only carline street traversing the area from east to west.

The area is thus divided into three large blocks within each of which the internal streets can be replanned to discourage through traffic.

In its study of the area the Board took cognizance of the recent activities of builders in the northerly and southerly blocks and the absence of building activity in the middle block, and of the fact that in the middle block the general plan of streets and the physical condition of the existing houses, suggested the necessity for a drastic revision of the plan before new building should be undertaken.

PUBLIC HOUSING SITE

It therefore made an exhaustive analysis of the middle area which is bounded by Parliament, Gerrard, River and Dundas Streets, and its recommendations respecting it have been based upon pertinent and significant facts gathered from the City's records, its own survey, and the results of the last Census as published by the Dominion Bureau of Statistics.

With respect to this specific area which has an area of 41.2 acres including internal streets, the total population is 3,717 which is a density of 90.2 per acre. The population is made up of 785 households, or family units, which occupy 708 dwelling units of which 640 are individual single family houses, the shortage of dwelling units being 77.

In 1940, 79% of these families earned from $1,000–$1,749 per year and 21% less than $1,000 per year. From this it was observed that the average of annual earnings for this area was somewhat higher than for families living in the area lying west of Parliament Street. Nevertheless, of the 785 families, 676 were tenants paying rents within the following ranges:

3% paid a monthly rent of from $ 1.00 to $ 9.00
12% paid a monthly rent of from $10.00 to $14.00
33% paid a monthly rent of from $15.00 to $19.00
29% paid a monthly rent of from $20.00 to $24.00
17% paid a monthly rent of from $25.00 to $29.00
3% paid a monthly rent of from $30.00 to $34.00
3% paid a monthly rent of from $35.00 to $39.00

These figures show that 94% of the tenant population of the area paid less than $30.00 rent per month, and 77% paid less than $25.00.

While no statistical data were obtainable as to the age of the buildings in the area, it is estimated that the average is from 60-70 years. The Census revealed moreover, that the average physical condition of the houses was low and that 48% of all dwelling units were heated only by stoves.

Since by far the majority of the present population are tenants rather than owners, it has been believed proper that reconstruction should be in the form of houses built solely for rent at not more than $25.00 per month, the present average rental being $21.00 per month.

At existing land values and construction costs it is doubtful if private enterprise can provide suitable housing to rent at that figure and, therefore, if new housing is to be provided for the present population, some form of subsidized public housing is indicated. The board, therefore, recommends this area as one suited for any public housing programme which may be undertaken.

Based upon data obtained from The Chicago Housing Authority with respect to its Jane Adams Houses, the Board has determined that with a land coverage by buildings of 28% of the net area, 165 persons, comprising 43 families, can be housed per net acre, in three-storey apartment buildings. For two-storey buildings, the figures are 106 persons or 28 families per net acre.

Applying these figures to the area in question, it can be seen that a three-storey development with a land coverage

of 28% would accommodate, on the 40.5 acres available, a total of 6,670 persons, or 1,755 families, which is an increase over the present population of 79.4%.

The figures also show that a two-storey development with the same land coverage of 28% would accommodate approximately 4,447 persons or 1,170 families, which is an increase of nearly 20% over the present figure. This increase in population, coupled with a decrease of 8.4% in land coverage, is made possible by the employment of the Super-Block principle in site planning, which principle has been followed generally in modern housing developments in the United States and other countries. As applied to the area considered, it involves the closing of Sumach and Sackville Streets from Dundas to Gerrard Street. Oak Street from Parliament to River Streets, and Otter Avenue, and the elimination of Vivian Street, Gerrard Avenue, Wilmot Street, Madeira Place, Digby Street, Home Place, Reed Street, Taylor Street, Sumach Place, Somerset Place, Bridge Street, Midland Place, Dean Street, Oak Street Place, and Dundee Avenue, all narrow lanes or dead end streets on which houses now stand. As a result, vehicular traffic would be diverted to the boundary streets, and the areas now devoted to interior streets and alleys consolidated, and devoted to open green areas and playgrounds for children.

With respect to the larger area bounded by Parliament, Carlton, River and Queen Streets the planning has aimed at improving the amenities to encourage an extension of the present trends of residential development by elimination of alley frontages and a rearrangement of internal streets to discourage through traffic. In both of these two blocks private builders have erected new houses recently and they should be encouraged to continue.

All the replanning proposals for the whole area referred to above are of course predicated upon the adoption of the Draft Zoning By-Law. Other areas which are shown on The Master Plan Series as Redevelopment Areas will, of course, require replanning based upon the same principles and factual data as have been used in preparing the specific proposals shown. In this connection it should be borne in mind that to accomplish its purpose successfully, redevelopment should be undertaken on a very large scale so as not to create isolated islands of new construction subject to the deteriorating influences of surrounding sub-standard areas.

It seems obvious that an essential preliminary to any redevelopment programme is the obtaining, by the municipality or other proper redevelopment authority, of powers of expropriation for replanning and rebuilding purposes, with adequate safeguards against exploitation. In some parts of the United States, such powers have been granted to private corporations, undertaking redevelopment work on a large scale.

Redevelopment Area—*Maps 52 and 53 at the end of this report, contrast the present condition and redevelopment possibilities in the area bounded by Gerrard St., River St., Dundas St., and Parliament St. as a low rent Public Housing site.*

Public Housing Project in Liverpool, England—*The third illustration at the end of this report shows the advantage to be gained by replanning residential areas and eliminating unnecessary streets. The large open spaces and grouped buildings are in marked contrast to present living conditions in Toronto. This development is however, less dense than is proposed in the area here discussed.*

SECTION V.—*Continued*

13. THE DOWNTOWN AREA

Downtown Toronto is the heart of the City, occupying the original site of the Town of York and spreading beyond it on all sides. In this area is concentrated the financial, wholesale, light manufacturing and theatre districts of the City. Here also is the Harbour, the Union Station, the larger hotels and the great mercantile establishments, while on its edge is Queen's Park with the University, a large Hospital group, the seat of the Provincial Government, and the grounds of the Canadian National Exhibition. Through this downtown area must pass most of the persons and goods destined for rail and water transportation and all persons en route to the island. Also into this area each day are moved a vast number of people to work and to shop, who in normal times jam the streets with vehicles and fill the cars of the public transportation system to their limit. It is the great market place of the City to which all roads lead.

It has grown steadily since the founding of the City, a growth which until the advent of the skyscraper was lateral and uniform in density. This steady expansion of the district outward was checked when the first tall building, viz: the old Traders Bank Building, was erected at Yonge and Colborne Streets. It came abruptly to an end with the erection of the group of skyscrapers at King and Yonge Streets which had the immediate effect of creating vacancies in the older buildings to the east. In the late 20's demands for more office space were met by the demolition of low buildings on Bay Street and the erection of many tall structures in their place. This development, part of which was speculative, coupled with an almost simultaneous decline of wholesale business on Wellington Street, over-ran the market, with the result that older buildings were vacated and later demolished to escape the payment of taxes on non-revenue-producing properties. The trend toward demolition in the central area was accelerated further by the erection of large office buildings near the edge of the area. The net result of this to-day is the existence in the downtown area of scores of vacant lots utilized for the parking of automobiles. This vacant land as some might suppose is not an indication of blight in, or abandonment of, the central area, but is the direct result of the stacking of business space in tall buildings, occupying little ground area, rather than being spread out horizontally.

MUNICIPAL PARKING LOTS

While the untidy and unsatisfactory appearance of the downtown parking lots at present detracts from the streets and is phsychologically bad, nevertheless these vacant lots

perform a most useful purpose in providing space for off street parking. They occupy about twenty-six acres in the area bounded by University Avenue, Dundas, Jarvis and Front Streets, and are the natural outcome of the growth of transportation by individual carrier, in lieu of public carrier, following the advent of the automobile. There is the important difference however, that whereas terminal facilities have been inseparable from public carrier systems, no similar provisions have been made in the case of the individual carrier other than the haphazard efforts of private enterprise.

The use of an automobile involves two essentials—a roadway upon which to run it and a place to store it when it is not being run. Without both it cannot be used and it seems only reasonable that the City, which for obvious reasons must control the provision of streets, should extend its jurisdiction to the second essential, namely parking facilities for the daily accumulation of upwards of 15,000 vehicles in the area, only 3,000 of which can now be legally parked at any one time at the curb.

Curb parking depreciates the traffic value of the standard 66 ft. car line street by about 60% and in view of the impracticability of widening it is evident that a progressive policy of parking prohibition must be followed to meet the inevitable increased traffic demand.

This and the fact that the present use of vacant lots for parking can only be considered temporary pending their requirement as building sites, indicates the desirability of the City securing the right to operate a system of parking lots as a municipally owned public utility.

It is perhaps fortunate that the development of the tall building came simultaneously with the universal adoption of the motor car. Since future demands for office and light manufacturing space will undoubtedly be met by the erection of more and more tall buildings of the type permitted by the Draft Zoning By-Law with consequent demolition of the older and lower buildings as they are vacated, it is certain that vacant land in the downtown area will be a permanent characteristic of that area. In fact the demand for off street parking of motor cars will in itself be an economic reason for their existence. The problem of dealing with them is obviously one of treating them as permanent features, which demands that they should conform architecturally with their surroundings, and should be so located as to satisfy their function as a public utility. A comprehensive study of existing vacant lots and of new ones as they appear seems to be imperative in order to integrate them properly into the plan of the downtown area. Certain of these now existing should undoubtedly be transformed into parks or squares which are most definitely needed in this area, others should be permanently set aside for and operated as publicly owned parking places and the variable remainder left in private ownership under strict public control as to use.

CIVIC CENTRE

While the utilization of vacant land for open spaces of one kind and another is a basic requirement of the downtown area much more in the way of open spaces is required than can be provided by this means at present. Perhaps the greatest need is for a large public square associated with the City Hall. Obviously the opportunity for acquiring the space for a square in front of the present building has been lost. However, the City Hall is already overtaxed in capacity and eventually either a new hall or an administration building must be built. From an architectural point of view, the site for such a building could best be provided on the lands lying between University Avenue and Bay Street north of Queen Street. In this area it is therefore recommended that all the privately held property lying between those streets from Queen Street to Dundas Street be acquired and set aside for the necessary administration buildings and a large and spacious plaza.

The utilization of this area for civic purposes would at once add importance to the already important University Avenue. This avenue is the one and only show street in the City but is unfortunately badly designed as an axial approach to Queen's Park. A much needed aesthetic and practical improvement consists in the redesign of the pavement and relocation of the South African War Memorial on a symmetrical plan. This improvement to University Avenue coupled with the widening of Queen Street to 120 feet, would at last provide Toronto with the monumental street design in its heart that is befitting a great city.

PUBLIC AND SEMI-PUBLIC INSTITUTIONS

Since The Master Plan has been prepared on the assumption that the Toronto urban zones will have a population of about 1,500,000, certain public and semi-public institutions will require room for expansion for which preparation should be made.

The Toronto General Hospital built in 1912 is now over thirty years old. Its site cannot accommodate more than a small increase in floor space and expansion to the south in the next few years seems to be the only possibility.

Some civic control should therefore be placed on all lands between University Avenue, Gerrard, Bay and possibly Dundas Streets to permit the expansion of the General Hospital and other like institutions now established or to be established in its neighbourhood.

Similarly, the University of Toronto which has doubled in size in the last thirty years, requires room for expansion. In its case, the land lying west from St. George to Spadina and from College to Bloor Street is the obvious area in which this expansion can take place. Here again control over these lands should be exercised so as to prevent development which would hinder that expansion.

Also there is the certainty that the Toronto Conservatory of Music, due to its growth as the premier music school in Canada, will require a new and much larger site, probably as part of a large Music centre in which it could be combined with a new Massey Hall and a projected headquarters of the Canadian Broadcasting Corporation. Since the Conservatory is in fact the Faculty of Music of the University of Toronto, the site should be in close proximity to the University, probably in the neighbourhood of Bloor Street between Spadina and University Avenues.

There are undoubtedly many other institutions, the importance of which demand that they be adequately sited as details of The Master Plan rather than being left to the chance acquirement of such property as may be temporarily available.

These public and semi-public institutions are the marks of a great city and the degree of importance and care for their appearance given to them is the mark of the culture and civic pride of its citizens.

Toronto is a great city, and it is time some steps were taken to assure that it will look the part.

POLES AND OVERHANGING SIGNS

Not the least important of these steps should be the elimination of the frontier town complex which condones the marring of its streets by overhanging wires and their unsightly supports, by thousands of signs overhanging the streets, and placards on the faces of buildings urging the drinking of this or that or the chewing of somebody's gum. These things have no place in the scene of the capital City of Canada's banner Province. They belong in the back lanes of Shanghai and Tokyo. In place of the poles, transformers and cables, trees should be planted on all streets such as Bloor Street from Spadina to Sherbourne and upper Bay Street, on Eglinton Avenue and Danforth Avenue, above all on Queen Street when widened, and on all other business streets where the sidewalk width will permit.

SECTION V.—*Continued*

14. LEGISLATION (*Ref. Section III-18*)

(a) Metes and Bounds—It is well recognised that unrestricted sale of land by metes and bounds, usually to avoid compliance with a city planning scheme, will disrupt that scheme to the distinct detriment of not only the community but also of the unfortunate purchasers. There is no desire or intention to interfere with real estate transactions that do not involve the principles of City Planning or to make the right to restrict applicable to areas to which the Planning and Development Act does not apply or to those in which local authorities have taken no action under that Act.

(b) Premature Subdivision—A study of the map of the City and its Suburbs gives the impression that the City instead of just spilling over, has exploded, flinging isolated residential developments far and wide across the countryside separated from one another by hundreds of acres of farm lands and lacking, because of their isolation, local means of earning a living and all that goes to make comfortable living conditions. If amenities are to be maintained and service costs kept within reason, the development of the urban area must proceed in an orderly manner.

(c) Planning Funds—The advantage from the standpoint of the taxpayers in the Metropolitan Area, of a regular annual appropriation for permanent improvements as compared with the present practice of funding the cost of such works, may be effectively illustrated by the facts in connection with the University Avenue.

The cost of this work rated at $3,751,000 was financed by the sale of 20-year 5% debentures involving twenty annual repayments of $313,000, or a total of $6,260,000 or about $2,500,000 more than the actual cost. Besides eliminating such long-term charges, a cash pay-as-you-go policy would reduce the cost by the elimination of temporary borrowing during construction.

The argument that posterity should relieve the present taxpayers of part of the cost of such improvements is fallacious because under a funding system about all that posterity pays is the interest charges which are unnecessary. In the event of a Metropolitan Planning Authority being established, it would seem desirable that the proceeds of an annual permanent improvement levy from all municipalities in the Metropolitan Area should be placed at its disposal.

(e) Dedication of Parks—It seems only reasonable that the subdivider who reaps the unearned increment from the land should be required to meet the demand for recreational space that the action of subdividing creates.

Since it is obvious that a literal adoption of this principle would not provide a satisfactory park system, it is suggested that the contribution of 5% could be made in either land or money to be used to build up a fund for the purchase of parks in suitable locations.

(f) Building Setbacks—The existing legislation in this regard embodies provisions with respect to the completion of a widening scheme that are unacceptable because they may entail a heavy monetary commitment at a distant date under financial conditions that cannot be foreseen.

It is inevitable that the great majority of the buildings in the City will be replaced at the end of their economic lifetime and it is reasonable to require that they should at that time in their own interests, be located to conform to an efficient highway plan. A right to compensation for damage due to a temporary setback of a few feet behind buildings not yet replaced will doubtless be urged in opposition to this proposal, but it is contended in spite of the very prevalent acceptance of this opinion, that this claim is based on presumption only and that actual damage can very rarely if ever be proven.

(h) Architectural Control—No regulation, no matter how comprehensive, will of itself bring to the City streets and buildings that quality of urban distinction which has hitherto been so much lacking.

Through all its history, fine buildings of all kinds have been erected in Toronto, but in general, the appearance of our streets and buildings could be greatly improved. It seems therefore reasonable to propose that a committee, composed of distinguished, public-spirited architects be formed for the purpose of regulating the appearance of new buildings within the City.

(i) Gasoline Tax and Automobile Licence Fees—It seems only equitable that the owners of vehicles who by their use of the City's highways, create the traffic problem, should make a contribution towards the solution of that problem.

A proportion of the funds derived from a tax of this kind should therefore be allotted by the Federal and Provincial Governments to cities and separated towns for the furtherance of matters of traffic regulation and the improvement of traffic facilities.

In Chicago, the City's share of the State gasoline tax, amounted in 1939 to the sum of about $6,000,000. The proceeds from this source are allocated to highway improvements approved by the State, and are now being used in connection with the Congress Street Superhighway project running westerly from Lake Michigan through the heart of the City at the impressive width of about 400 feet.

(k) Protection of The Master Plan — Since a master plan to be effective must be designed to govern development over a period of years, it is evident that its implementation may become much more costly or even be negatived if any part be exploited. However, provision must first be made for official endorsation of the plan by competent authority and for certain temporary building uses of the lands comprised in future highways or other projected features.

SECTION VI.—PROGRAMME FOR 1944

As has been stated elsewhere, this report portrays principles only and much remains to be done by way of negotiation and conference to pave the way for its general acceptance and still more in the form of physical investigation and field work before it can be considered ready in all its details for constructive action. These matters will engage the close future attention of the Board which, without in any way limiting the generality of the foregoing, proposes to deal specifically with the following programme in 1944:

1 Further development of The Master Plan, following its approval by the Municipalities concerned to permit its implementation as the need and opportunity arises.

2 Preparation in co-operation with the appropriate civic departments of detailed plans, specifications and estimates of cost of such parts of The Master Plan as may be accepted by Federal and Provincial Governments and the Municipalities concerned as being suitable for an immediate post war programme.

3 Active co-operation with the City's Legal Department in obtaining the approval of the Ontario Municipal Board to the Draft Zoning By-Law following its enactment by Council.

4 Preparation in conjunction with the adjacent Municipalities of co-ordinated and comprehensive zoning by-laws that will fit into The Master Plan and carry out its general idea of balanced neighbourhoods.

5 To prepare briefs for and recommend to the Councils of the interested Municipalities the establishment of:

(a) A Metropolitan Area Planning Authority.

(b) A Regional Planning Authority

6 Assist the City in securing the passage of such items of the Legislative programme included in this report as may be approved by Council.

7 Continue studies of sub-standard Housing areas as may be required by the Toronto Housing Board.

8 Study the needs for and the location of:

(a) Central and Neighbourhood Produce Markets

(b) A Civic Centre.

(c) National Centres for the Arts, Science and Music.

(d) Airports for planes and helicopters.

(e) Tourist Camps.

(f) Additional Recreational facilities.

9 Collaboration with:

(a) Educational Authorities in respect to such adjustments of educational facilities as may be rendered necessary by the adoption of The Master Plan.

(b) The Canadian Hospital Council in regard to the future Hospital requirements of the Metropolitan Area.

(c) The University of Toronto in a study of its post war programme for expansion.

10 From the standpoint of smoke elimination, study the possibility of Railway Electrification, supplemented by Diesel Switching, and Central Heating as a public utility.

11 To give effect to the proposal of the Street Naming Committee, appointed by the Board, that, to clear up present confusion in the names of nearly 600 streets in the Toronto Postal District, the co-operation of the adjacent Municipalities affected be sought.

—The thanks of the Board are due to Messrs. E. R. Arthur, Chairman; A. P. C. Adamson, D. G. Creighton, E. C. Guillet and Douglas Robertson—members of this Committee for the progress they have already made.

12 Develop in conjunction with the adjacent Municipalities a local street plan that conforms to the main features of The Master Plan.

APPENDICES

1. LIMITED DIVIDEND HOUSING CORPORATIONS IN THE UNITED STATES.

Under State laws in Massachusetts, New York, Illinois and California, private corporations have been given powers to acquire property in large blocks in sub-standard areas by expropriation for the purpose of redeveloping those areas for housing. Both the Prudential and Metropolitan Life Insurance Companies have built large housing projects under this legislation.

In the State of Massachusetts however, private enterprise has not availed itself of the powers provided under the Limited Dividend Housing Law and all redevelopment in that State has been undertaken by public housing authorities employing public funds for the construction and operation of subsidized low-rent housing projects.

Therefore, in order to make the field of redevelopment more attractive to private enterprise, the legislature of the Commonwealth of Massachusetts has now under consideration the Report of a Special Recess Commission which Commission has proposed that limited dividend housing corporations be also empowered to embark on commercial and industrial projects incidental to housing projects undertaken. The extent to which it is proposed to permit commercial and industrial redevelopment is limited to those projects which may in the opinion of a supervising authority, be properly appurtenant to a housing project.

This is a broad interpretation of the redevelopment problem, but one which is worthy of serious consideration. For a fuller discussion of the subject reference may be made to "The Report of the Special Recess Commission Appointed for the Purpose of Investigating Limited Dividend Housing and Housing Standards"—The Commonwealth of Massachusetts, April 1943, a copy of which is on file in the Planning Office of the City Planning Board of Toronto.

2. REGIONAL PLANNING.

The following memorandum is based on discussions and conferences held in the Office of the City Planning Board between Messrs. A. E. K. Bunnell and S. R. Frost of the Advisory Technical Committee of that Board, Prof. R. F. Legget, Prof. A. F. Coventry and D. F. Putnam of the University of Toronto, and L. J. Chapman of the Ontario Research Foundation.

Toronto, Ontario
15th December, 1943.

D. F. Putnam.

THE REGIONAL GREEN BELT AND RURAL PARK AREAS.

TORONTO is the centre of an undulating plain of glacial material which for twenty or thirty miles in most directions comprises good farm land. Beyond this, we encounter marked topographic features which make the land of less value for agriculture and, at the same time, provide more varied scenery. On the west, from Hamilton northward to Credit Forks, is the Niagara escarpment, formed of resistant dolomitic rock, which rises from an elevation of about 700 feet at Hamilton to 1,400 feet at Credit Forks. The face of this escarpment is throughout most of its length, rather precipitous and is not to be considered as arable land. Where cleared and farmed it is noticeably subject to erosion. It would, therefore, undoubtedly be more of an asset to the region at large if returned to forest.

The edge of the Niagara escarpment also contains several fairly deep indentations, which are the valleys of numerous creeks arising in swampy areas above the escarpment. These glens are, or could be made an undoubted scenic attraction. There are also several outstanding look-out points along the escarpment from which excellent views of the agricultural plain beneath may be obtained, among them Mt. Nemo, Rattlesnake Point and others which bear no names.

This whole area then, including the face of the escarpment, the valleys indenting it, and the tracts of swampy land within three or four miles of the top of the escarpment, would make an excellent rural green belt, which besides providing scenic and recreational facilities, would also serve to protect the water supply of the creeks which flow toward the agricultural plain. North of Credit Forks the character of the escarpment changes somewhat because it is overlain by heavy morainic deposits. The slopes are somewhat more gentle and longer in this area; there are some tracts of farm land, or at least of good pasture land which should probably not be returned to forest if viewed from an economic aspect. However, there is also in this area a good deal of steeply sloping land which should be reforested; so that while the green belt in this region will not be so dense, it should nevertheless be considered as part of it. Just east of the Caledon Mountain, but so deeply buried that no rock is seen, the escarpment turns northward and continues toward Collingwood. While more distant from Toronto, the scenic possibilities of this area and its undoubted conservation needs deserve consideration also. The moraine continues toward the east and extends more or less continuously to the vicinity of Rice Lake.

Considered from the viewpoint of the Toronto City Planning Board this moraine is a logical continuation of the escarpment region. The slopes are more gentle; the material is unconsolidated, and often sandy, morainic deposits. The topography is hilly and to a large extent not suitable for extensive agriculture; also many tracts are excellent pasture lands. Those areas which are overlain by loose sand especially where wind erosion has been active should be reforested and those areas of sloping land in which water erosion is noticeable should have properly planned control measures applied. It is probable that this would result in retiring from cultivation a considerable portion of this area, with the result that the landscape would consist largely of grass and trees. The scenic effect of this treatment should be very pleasing although differing from that of the Niagara escarpment. While the whole moraine should logically be included in any conservation planning we would like to see it continued as far east as the area north of Oshawa where a narrow belt of planning might be continued down the Oshawa Creek to the vicinity of that City. It would thus be possible to plan a peripheral driveway from Oshawa along the Moraine and the Escarpment to Hamilton entirely within what might be termed landscaped territory. An addition to this green belt which would include the banks of the Humber and which would extend from the moraine at least to the outskirts of the Town of Weston should also be reforested to as great an extent as possible. The conditions within the area of the moraine are exemplified in the report on King Township by K. M. Mayall and in Carman's discussion of the Big Creek drainage unit.

Conservancy Region—*Map 70 at the end of this report illustrates the extent, present conditions, and possibilities of the region discussed in this appendix.*

PARK AREAS

Within this general green belt certain areas should be set aside as parks.

(1) Mt. Nemo from which a splendid view may be obtained of the plain beneath;
(2) the outlier of the escarpment on which Rattlesnake Point is situated;
(3) the Limehouse area west of Georgetown;
(4) the Credit Forks region;
(5) Hackett Lake area;
(6) Chalk Lake area.

These areas should be bought outright and treated as permanent public parks which would be easily accessible from the proposed peripheral driveway.

Within the circumscribed agricultural plain it would be advisable to establish two or three park areas which would be within shorter driving distance of the City. It is suggested that one such area might be established north of Brampton including within its bounds Heart Lake and the Brampton Water Works. A second such area might be established north of Woodbridge along the east branch of the Humber River. A third such area might conceivably be located along the banks of Rouge River east of the City of Toronto.

CONSERVATION WITHIN THE AGRICULTURAL PLAIN

While it is conceded that the enclosed plain will remain under its present agricultural exploitation almost unchanged, under this programme there are nevertheless certain conservational measures which should be urged. The question of water supply which has been so well stressed by Professor Coventry should be given considerable attention. Most of the streams within the area no longer flow throughout the year but are subject to desiccation in the summer and to disastrous floods in the Spring. Protective planning where possible along banks and around head waters should be encouraged. In certain areas also there is considerable soil washing with the result that the muddy waters carry good top soil out to Lake Ontario. This should be prevented. Any improvement in the agricultural landscape is, of course, of direct benefit to the region.

THE LAKE SHORE AREA

The shore of Lake Ontario is the most important geographical feature of the Toronto region; there are a number of factors concerning it which require special consideration.

In the first place there is the peculiar configuration of the surface. Within recent geological times, as shown by Prof. Coleman the waters in the Lake Ontario basin stood at a higher level. In consequence there is a narrow strip of country back of the present shore line, a part of the old lake bottom, which is of smoother topography and gentler relief than the rest of the area. Consequently we find that railways, highways, and residential areas tend to occupy this strip.

Also because of the old lake, the surface deposits in this area consist largely of sands and loams which have developed into soils well adapted to the growing of fruit and vegetable crops which find a ready market in the urban community.

A third factor is that of the climatic influence of the lake, modifying both summer and winter conditions. This tends to increase the desirability of the area as a special crop district and for residential purposes as well.

Further, the communications, already established on the lake plain, and the possibilities of water transport on the lake itself, are tending to the development of numerous industries in this strip. The result has been the development of a very heterogeneous condition of land utilization. Farm land of particular qualifications has given place to suburban residential areas, to large ornamental private estates, to industrial sites and to shack towns and rural slums. The recreational functions of this lake shore strip have received little attention, and undoubtedly by the time a demand arises within the area itself no suitable sites will be available. There is no doubt that this need should be foreseen and suitable studies made toward a solution of the problem. It should, of course, be stated that most of the above observations more particularly concern the shore area between Toronto and Hamilton, but they also apply to some degree east of Toronto as well.

PREPARATORY STUDIES

The establishment of this regional green belt and the improvement of the streams and of other conditions within the agricultural plain, cannot, of course, be accomplished without a good deal of preliminary investigation. It should be said that it would require the setting up of some kind of a conservancy district in the administration of which it would be necessary to have the participation of Federal and Provincial Government Departments as well as that of the City Planning Board. In order to be entirely successful all three should work in harmony. The project would require rather complete aerial analysis in the process of which the characteristics of the lands concerned would be catalogued completely and accurately. A considerable number of studies have been made which contain useful information for this purpose but a great deal still remains to be done. A list of these investigations is appended to this report.

With the information gathered from the available sources, properly analyzed and charted, a fair start toward a complete aerial analysis of the region would be obtained. There would still remain much information to be gathered—a good deal of it in the nature of detail to be added to the studies already made, or extensions of surveys into adjoining areas in order to cover the whole area. Among the studies necessary to an adequate understanding of the region are:

1. Description of the geological deposits underlying the area, both bed-rock and surface.
2. The soil mapping of the area should be completed and reports prepared.
3. The studies on water supply should be completed and put into available form.
4. A survey of soil erosion and conservation needs should be made.
5. Complete land classifications in terms of inherent capacity and recommended use should be prepared.

From a geographical viewpoint, the so-called Toronto region is only a small part of a much larger region; its claim to consideration as a regional unit rests largely in its relationship to the Toronto Metropolitan Area. The creation of a rural green belt and the undertaking of any other measures of a conservational nature should be planned in harmony with both these relationships. It is not out of place here to urge the setting up of machinery to study the whole question of conservation needs in Ontario, and particularly in the older settled region. Sweeping generalizations and the pointing out of one or two glaring examples do not constitute an adequate basis for the formulation of a constructive programme; the region is much too varied in its nature and its needs. The hinterland of Toronto, itself, is comparatively simple, consisting as it does, of an agriculturally developed lowland and an upland rim in which farming is largely out of place. The obvious function of this latter belt is as a protective watershed and recreational area, although no one would be so rash as to advocate the entire elimination of all agricultural and pastoral pursuits. The object of land use planning is the proper integration of the inherent characteristics and the required functions within the area.

Finally, it is urged that the time element be given consideration. Much discussion has taken place regarding the possibility of providing employment in conservation projects during the post-war period. There exists here an opportunity for conservation of natural resources of intrinsic economic worth as well as the creation of a recreational area, within a reasonable distance of the City. It would indeed be fortunate if plans for its development should reach an advanced stage in the near future.

Partial List of References on the Nature of the Toronto Region

1. Carman, R. S.
   Wilmot Creek Drainage Unit (Northern part) Ontario Forestry Branch, 1940.
2. Carman, R. S.
   The Glacial Pot Hole Area, Durham County, Ontario. The Forestry Chronicle, September 1941: 110-20.
3. Chapman, L. J., and D. F. Putnam.
   The Soils of South-Central Ontario Scientific Agriculture 18: 161-197 1937.
4. Chapman, L. J., and D. F. Putnam.
   The Physiography of Southwestern Ontario. Scientific Agriculture 24: 101-125, Nov. 1943.
5. Coleman, A. P.
   Pleistocene of the Toronto Region. Annual Report of the Ontario Department of Mines, Vol. 41, Part 7, 1932.
6. Coleman, A. P.
   Lake Iroquois. Annual Report of the Ontario Department of Mines, Vol. 45, Part 7, pp. 1-36, 1937.
7. Coventry, A. F.
   Desiccation in Southern Ontario. Transactions of the Royal Society of Canada, Section V., pp. 15-23, 1940.
8. Linton, G. M.
   A survey to Segregate Absolute Forest Soils in Concessions VIII, IX, and X of Clark Township, Ontario Forestry Branch, 1922.
9. Mayall, K. M.
   The Natural Resources of King Township, Toronto, 1938.
10. Putnam, D. F., and L. J. Chapman.
    The Physiography of South-Central Ontario. Scientific Agriculture 16: 457-477, 1936.
11. Putnam, D. F., and L. J. Chapman.
    The Climate of Southern Ontario. Scientific Agriculture 18: 401-466, 1938.
12. Richards, N. R., and F. F. Morwick.
    Soil Erosion and Land Use Survey. Hope Township Project Area, Durham County, Ontario.

The Experimental Farms Service, Dominion Department of Agriculture and The Ontario Agricultural College, Guelph, Ontario, 1943.

13. Williams, M. Y.
The Silurian Geology and Faunas of Ontario Peninsula and Manitoulin and Adjacent Islands.
Geological Survey Memoir 111, 1919.

14. Wilson, A. W. G.
The Physical Geography of Central Ontario.
Canadian Industrial Transactions 7:139-186, 1903.

SOIL SURVEYS

The following areas have been surveyed by the Dominion Experimental Farms Service and the Ontario Agricultural College in co-operation, but reports have not yet been published.

Dufferin County—L. R. Webber.

Halton County—F. F. Morwick.

Peel County—L. R. Webber.

York County—L. R. Webber.

Durham County—L. R. Webber.

WATER SUPPLY

Considerable data on conditions in the area were collected by Prof. Clarke of McGill University and Dr. T. F. Caley of the Geological Survey, and is on file at Ottawa.

3. LETTER FROM TORONTO TRANSPORTATION COMMISSION.

November 30th, 1943
Our Ref. 10-97-9

Mr. Martin Baldwin,
Secretary, City Planning Board,
The Art Gallery of Toronto,
317 Dundas Street West,
Toronto, 2B.

Dear Sir:

Under date of January 22nd, 1942, the Toronto Transportation Commission submitted to the City a proposal for certain rapid transit lines to be developed as a part of the city public transportation system.

At that time, the City had not appointed a City Planning Board, and the Commission stated in its proposal:—

"Over a long period of years, Toronto has not, by City Planning, adopted any definite policy of development. If it did, the T.T.C. would gladly co-operate".

Shortly thereafter the City appointed the present City Planning Board, and in line with its promise, the Commission throughout 1942 and 1943 has carefully re-studied and revised its plans for rapid transit lines, so that they would fit in with the proposals of the City Planning Board for super highways, the improvement and widening of existing thoroughfares, parkways, housing developments and slum clearance. The proposals of the City Planning Board have in fact made it possible for the Commission to design a more comprehensive and satisfactory rapid transit system than was at first thought possible or practicable. The Commission appreciates the co-operation of your Board and its Advisory Technical Committee in this work.

For the information of the City Planning Board, the Commission submits herewith a plan showing the revised proposals for rapid transit lines, which we believe are or can be fully co-ordinated with the Board's other proposed planning projects.

The Commission's revised project includes two lines. One, starting north of Heath Street, runs southerly in the vicinity of Yonge Street to Front Street, thence along Front Street to University Avenue, north on University Avenue to Bloor Street, and west in the proposed depressed Superhighway "E" to Dundas Street.

The second line commences at Pape Avenue above Gerrard Street and parallels the C.N.R. railway to Queen Street. It would then run as a subway under Queen Street to Trinity Park, and thence northward along the proposed depressed Superhighway "B" to St. Clair Avenue.

It is not necessary at this time to detail all the ancillary arrangements involved in the construction of these rapid transit lines. It is sufficient at the moment to state that the rapid transit system as above described and indicated on the attached plan is acceptable as to location, to the Toronto Transportation Commission. It should, however, be pointed out that the Bloor Street depressed highway as a location for a rapid transit line would be acceptable for that purpose, only if located within two hundred feet or so of Bloor Street, where it could provide the necessary local service.

The Toronto Transportation Commission respectfully recommends to your Board that the accompanying plan for proposed rapid transit lines be incorporated either as an integral part of The Master Plan suggested for Toronto, or as a separate plan which will fully indicate the vital importance of public transportation in City Planning.

Yours faithfully,
(Signed) H. C. PATTEN, General Manager.

4. CATALOGUE OF MAPS, DRAWINGS, ETC., ILLUSTRATING THE MASTER PLAN

PAST HISTORY

1. Yesterday	Illustration.
2. To-day—140 Years Later	Illustration.
3. Establishment of Town of York	Geology and Topography.
4. Early Growth Limited by Geographic Features, 1834-1853	Built-Up Area of Early City.
5. City Area Increased by Railway Development, 1853-1883	Railways Determine Industrial Areas.
6. Increase of the City Area by Annexation, 1883-1914	Annexation and Ward Division.
7. Lateral Expansion and Vertical Growth of Toronto, 1914-1943	Toronto Metropolitan Area.

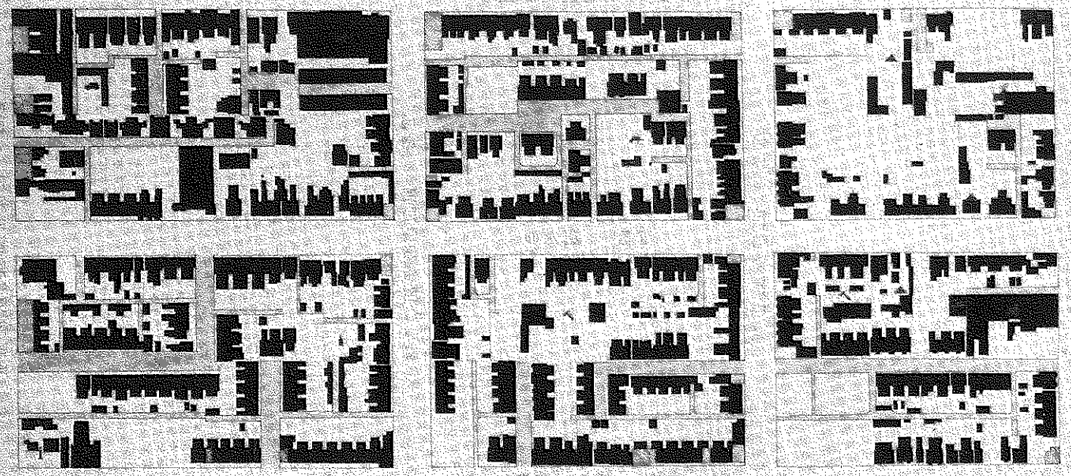
PRESENT CONDITIONS

1. Population	Growth of Population by Decades, 1900 to 1940.
2. Population	Distribution of Population. Increase and Decrease in Residential Areas.
3. Population	Increase and Decrease of Population.
4. Residential Areas	Population Density.
5. Population	Rate of Growth, Amount of Growth.
6. Geography	Topography of the Urban Region.
7. Geography	Relationship of Street Pattern to Contours.
8. Aerial View of Toronto, 1941.	
9. Land Use	Developed Areas.
10. Land Use	Successive Subdivisions.
11. Land Use	City Owned Properties.
12. Land Use	Residential Areas Related to Industries and Parks.
13. Land Use	Parks in Relation to Ravines and Industrial Barriers.
14. Residential Areas	Family Earnings of Wage Earners.
15. Residential Areas	Percentage of Wage Earner Home Owners.
16. Residential Areas	Wage Earner Households Paying Under $20 Month Rent.
17. Residential Areas	Percentage of Multiple Family Households.
18. Residential Areas	Heavy Traffic Subdividing Homes from Schools.
19. Residential Areas	Major Barriers Limiting Residential Districts.
20. Industrial Areas	Distribution of Commerce and Industry.
21. Land Use Map, 1940-1943.	
22. Recreational Areas	Relation of Recreational Areas to School Districts.
23. Recreational Areas	Green Open Spaces.
24. Recreational Areas	Neighbourhood Recreational Facilities.
25. Recreational Areas	Winter Recreational Facilities.
26. Recreational Areas	Summer Recreational Facilities.
27. Recreation	Regional Scenic Features.
28. Circulation	Street Pattern of the Built-Up Area.
29. Circulation	Regional Highway Pattern.
30. Circulation	Maximum Traffic Flow.
31. Circulation	Traffic Accidents in 1942.
32. Circulation	Location of Fatal Traffic Accidents, 1935-1943.
33. Accidents in Toronto Causing Damage and Personal Injury Amounted to 5527 During 1942.	Illustration.
34. Circulation	The Heart of the City, Downtown Parking Areas.
35. Circulation	Congestion Points.
36. Circulation	Traffic Congestion. Illustration.
37. Circulation	Traffic of Vehicles 12-Hour Count.
38. Circulation	Traffic Counts Through Natural Barriers.

39. Circulation	Highway Approaches and Traffic Flow.
40. Circulation	Adequate Street Width.
41. Circulation	Previous Planning Proposals.
42. Circulation	Traffic Flow on University Avenue During 2-Hour Rush Periods, 1943.
43. Circulation	Development of Transportation, 1901-1911.
44. Recent Major Street Construction	Illustration.
45. Civic Economics	Increase and Decrease of Assessment Values.
46. The Trend of the Population, Land and Structure of Toronto	Data, Evolution, Evaluation.
47. Redevelopment Areas	Illustration.
48. Redevelopment Area	University Avenue Between Front and Queen. Illustration.
49. Redevelopment Plan East Side	Street Pattern Land and Building Use.
50. Redevelopment Plan East Side	Proposed Street Pattern and Zoning.
51. Redevelopment Plan East Side	Condition of Ownership in Proposed Public Housing Area.
52. Redevelopment Plan East Side	Land and Building Use in Proposed Public Housing Area.
53. Redevelopment Plan East Side	Street Pattern in Proposed Public Housing Area.
54. Dilapidated Dwellings in the Development Area	Illustration.
55. Residential Areas	Bad Housing Conditions. Illustration.
56. Public Housing	Planned Communities in the United States. Illustration.
57. Residential Areas	Low Rental Housing. Illustration.
58. Residential Areas	"The Sunnylea" Etobicoke Neighbourhood School. Illustration.
59. The Master Plan, 1943.	
59a. Rapid Transit System	Stages of Development.
60. Map of Draft Zoning By-Law, 1942.	
61. Residential Areas	Natural Neighbourhoods.
62. Residential Areas	Prospective Population Related to Industries.
63. Industrial Areas	Location of Existing and New Industries.
64. Recreational Areas	Parks, Green Belt, Open Spaces.
65. Circulation	Highways and Street Pattern.
66. Circulation	Superhighways Related to Topography.
67. Circulation	Highway and Street Pattern.
68. Circulation	Pavement Widenings.
69. Circulation	Railway Pattern of Urban Region.
70. Circulation	Regional Green Belt and Highways.
71. Circulation	Limited Access Highways and Grade Crossings. Illustration.
72. Circulation	Superhighway Grade Separations and Cloverleafs. Illustration.
73. Circulation	Airfields, Training Fields, Airports in Relation to Urban Centres in the Toronto Region.
74. Relief Model	Toronto Area—1600' Scale.

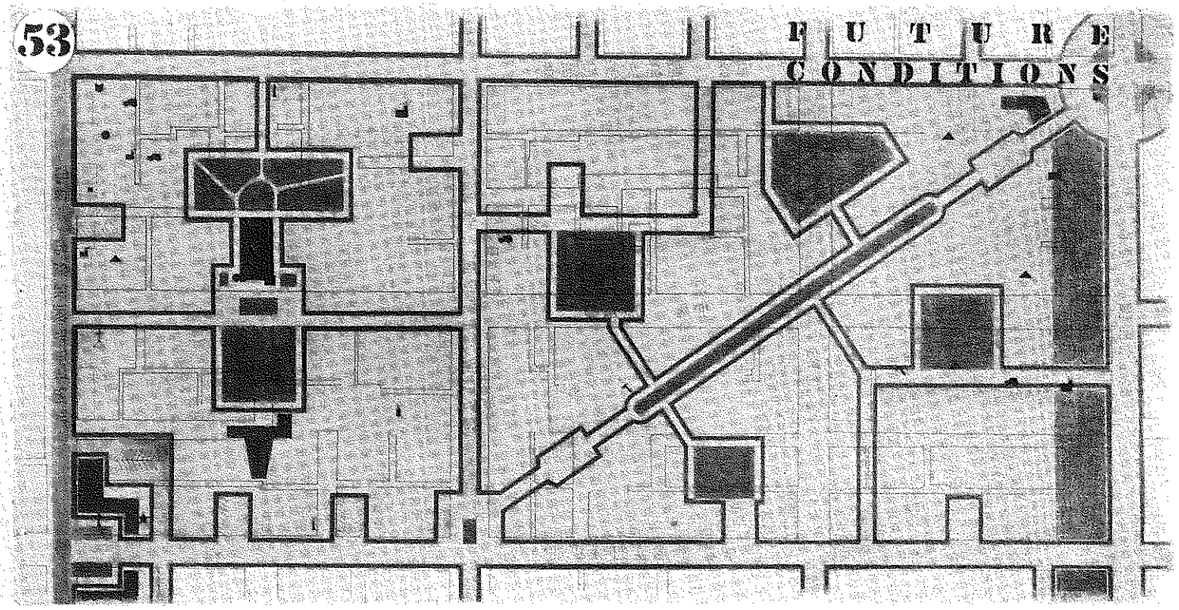
52

EXISTING CONDITIONS



53

FUTURE CONDITIONS



FEET 50 0 50 100 150 200 250

TOTAL AREA

DUNDAS PARLIAMENT GERRARD & RIVER STREETS
41.20 ACRES

STREETS	9.30 ACRES	22.6%
BUILDINGS	11.60 ACRES	27.2%
NET AREA WITHOUT STREETS	31.9 ACRES	
BUILDINGS	11.60 ACRES	
COVERAGE		36.4%

SYMBOLS

- CHURCH
- FACTORY
- STORE
- GARAGE
- SERVICE STATION
- FUEL YARD
- BUILDING CONTRACTOR'S YARD
- CITY OF TORONTO YARD
- HOTEL
- THEATRE
- APARTMENT HOUSE
- FIRE HALL & POLICE STATION
- JUNK YARD
- LANES

FEET 50 0 50 100 150 200 250

LEGEND

- AREA RESERVED FOR DWELLINGS
- PARK AREAS AND PLAYGROUNDS
- STORES
- COMMUNITY CENTRE AND ADMINISTRATION
- SIDEWALKS
- STREETS
- PARKING SPACE

SYMBOLS

- CHURCH
- FACTORY
- STORE
- GARAGE
- SERVICE STATION
- FUEL YARD
- BUILDING CONTRACTOR'S YARD
- CITY OF TORONTO YARD
- HOTEL
- THEATRE
- APARTMENT HOUSE
- FIRE HALL AND POLICE STATION
- JUNK YARD

LAND AND BUILDING USE IN PROPOSED PUBLIC HOUSING AREA

STREET PATTERN IN PROPOSED PUBLIC HOUSING AREA

REDEVELOPMENT PLAN — EAST SIDE

MAP 4

Steele's
Albion Rd.
Kipling
C.P.R.
Jane
Keele
Dufferin
Bathurst
Yonge
Bayview
C.P.R.
Leslie
Woodbine
Victoria Park
Pharmacy
Warden
Birchmont
Kennedy
Midland
Brimley
North Secor
Markham
C.P.R.
Lansing
Finch
Sheppard
Mallon Rd.
C.N.R.
King's Highway
Islington
Wilson
Dixon
Lawrence
Richview
Eglinton
Hydro Electric Power Commission
ETOBICOKE
NORTH YORK
SCARBOROUGH
EAST YORK
FOREST HILL
Burnhamthorpe
Dundas
C.P.R.
Queen Elizabeth Way
Lake Shore Rd.
Queen
Dan forth
Kingston Rd.
LAKE ONTARIO

1 0 1 2
Scale in Miles

REPORT OF THE
CITY PLANNING BOARD
TORONTO 1943

CITY OF TORONTO
ADEQUATE PAVEMENT WIDTHS

LEGEND

PAVEMENTS 48' WIDE AND OVER ON CAR LINE STREETS
PAVEMENTS 32' WIDE AND OVER ON OTHER STREETS

URBAN LIMIT

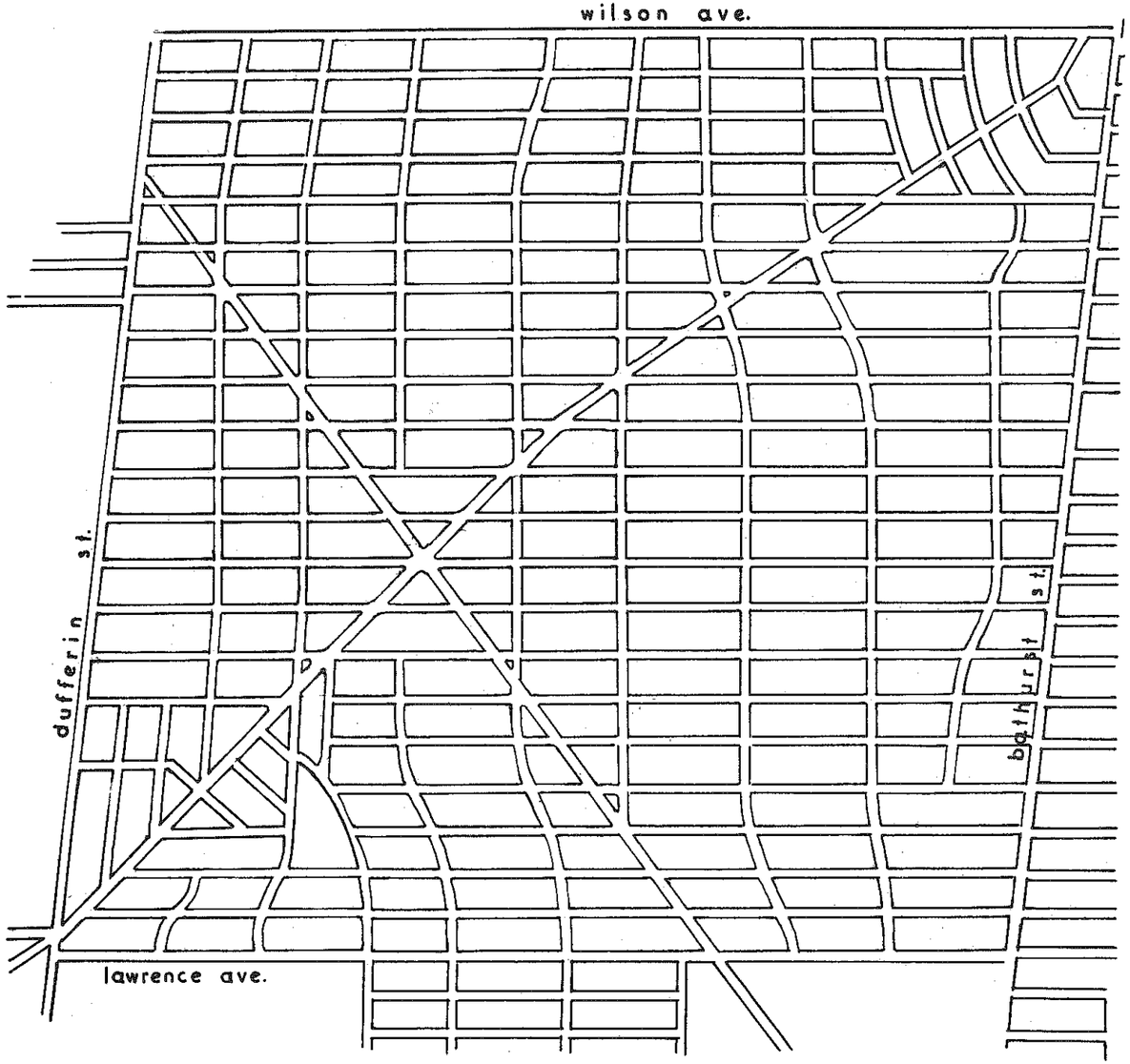
Steele's
Albion Rd.
Kipling
C.P.R.
Jane
Keele
Dufferin
Bathurst
Yonge
Bayview
Leslie
Woodbine
Finch
Victoria Park
Pharmacy
Warden
Birchmont
Kennedy
Midland
Brimley
North Scor
Markham
C.P.R.
Lansing
Sheppard
Malton Rd.
C.N.R.
N O R T H Y O R K
Wilson
C.N.R.
Wilson
Kings Highway
Islington
Dixon
Weston
Lawrence
S C A R B O R O U G H
Hydro Electric Power Commission
Lawrence
Richview
Eglinton
Hydro Electric Power Commission
74 MI.
C.N.R.
Eglinton
E T O B I C O K E
FOREST HILL
EAST YORK
Kingston Rd.
St. Clair
Burnhamthorpe
Dunn
C.P.R.
Queen Elizabeth Way
Lake Shore Rd.
L A K E O N T A R I O
1 0 1 2
Scale in Miles

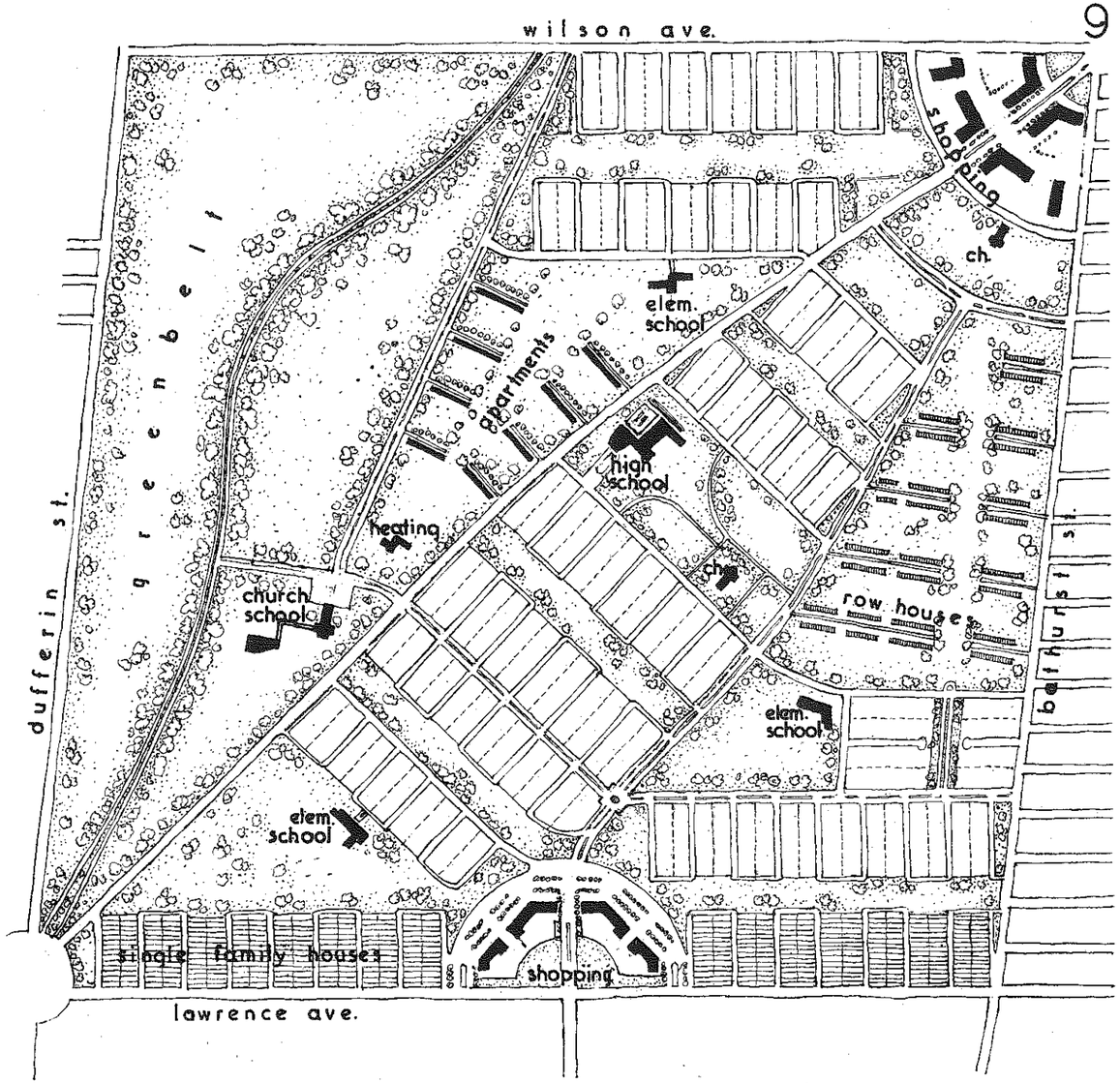
REPORT OF THE
CITY PLANNING BOARD
TORONTO, 1943

CITY OF TORONTO
PROPOSED PAVEMENT WIDENINGS

LEGEND

- EXISTING ADEQUATE PAVEMENTS
- PAVEMENTS MADE ADEQUATE BY REMOVAL OF CAR LINES
- PROPOSED WIDENINGS ADEQUATE PAVEMENTS
- PROPOSED WIDENINGS OTHER PAVEMENTS
- URBAN LIMIT





SUBDIVISION UNDER EXISTING CONDITIONS COMPARED WITH SUBDIVISION FOR NEW NEIGHBOURHOODS

REPORT OF THE
CITY PLANNING BOARD
TORONTO, 1943

1000 0 1000 2000

SCALE IN FEET

MAP

N O R T H Y O R K

S C A R B O R O U G H

E T O B I C O K E

Yonge

10 Mi.

7½ Mi.

5 Mi.

2½ M.

Queen

L A K E O N T A R I O

1 0 1 2

Scale in Miles

L E G E N D

1 - 4 PERSONS PER ACRE

5 - 9 " " "

10-19 " " "

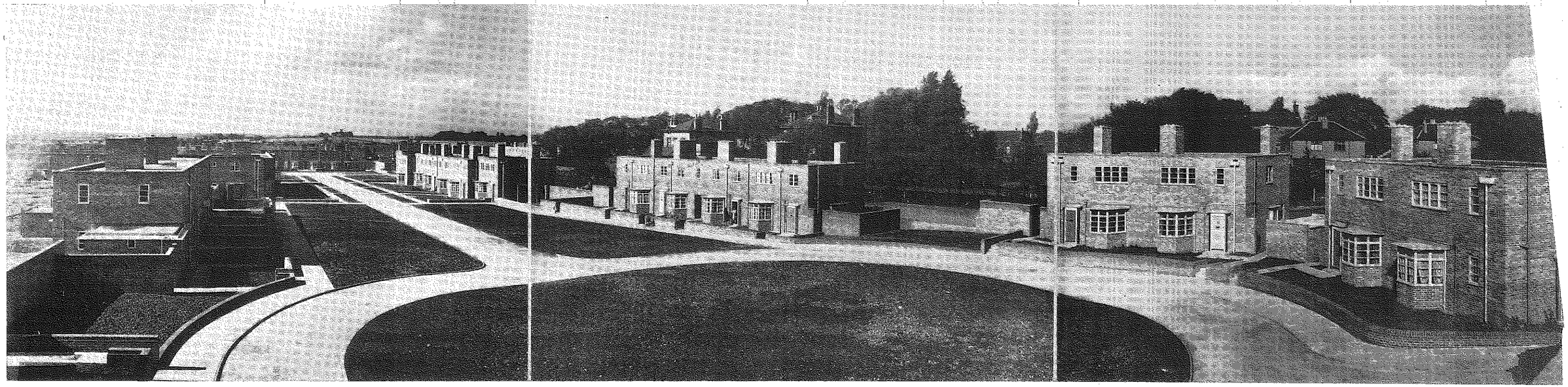
20-29 " " "

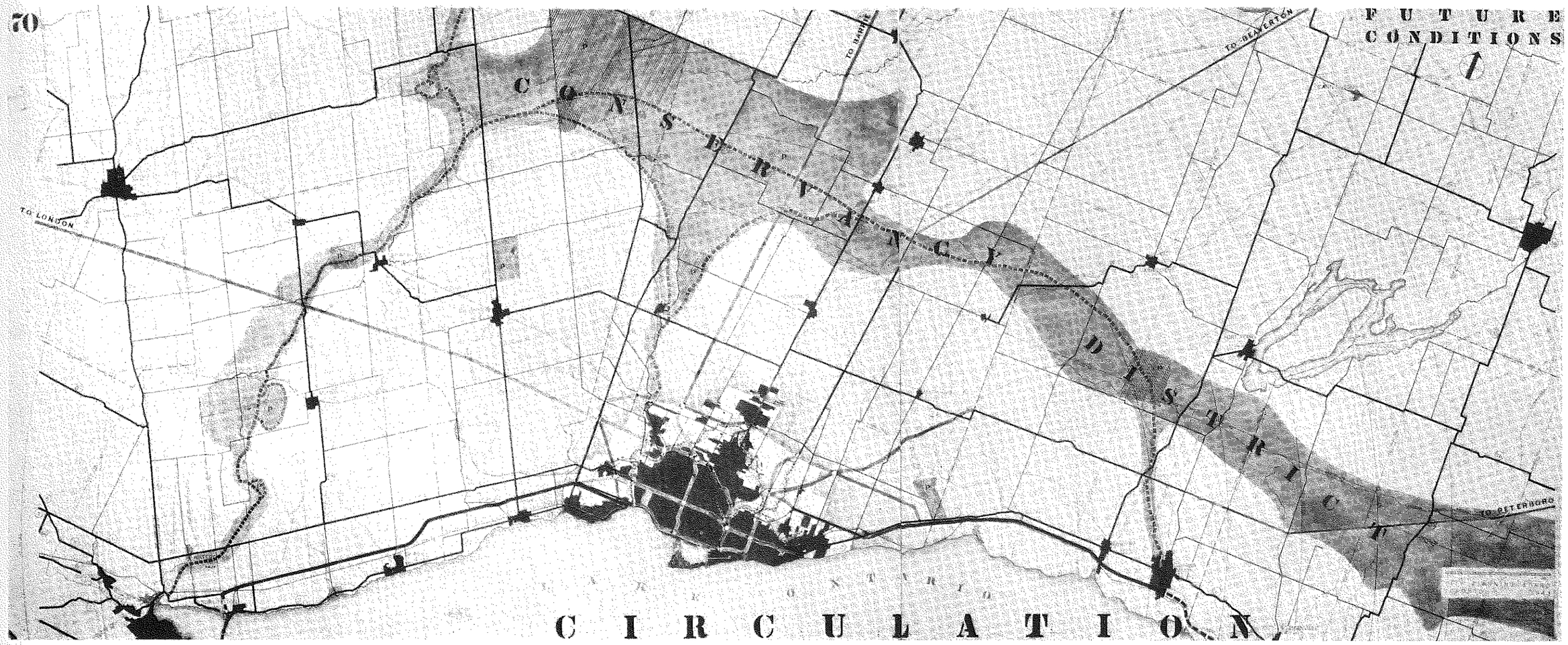
30-39 " " "

REPORT OF THE
CITY PLANNING BOARD
TORONTO, 1943

T O R O N T O U R B A N A R E A

POPULATION DENSITY OF DEVELOPED AREAS





REGIONAL GREENBELT AND HIGHWAYS

LEGEND

CIRCULATION

- REGIONAL PARKWAYS
- EXISTING EXPRESS HIGHWAYS
- UNCOMPLETED EXPRESS HIGHWAYS
- EXISTING PROVINCIAL HIGHWAYS
- PROPOSED EXPRESS HIGHWAYS
- COUNTY AND SUBURBAN ROADS

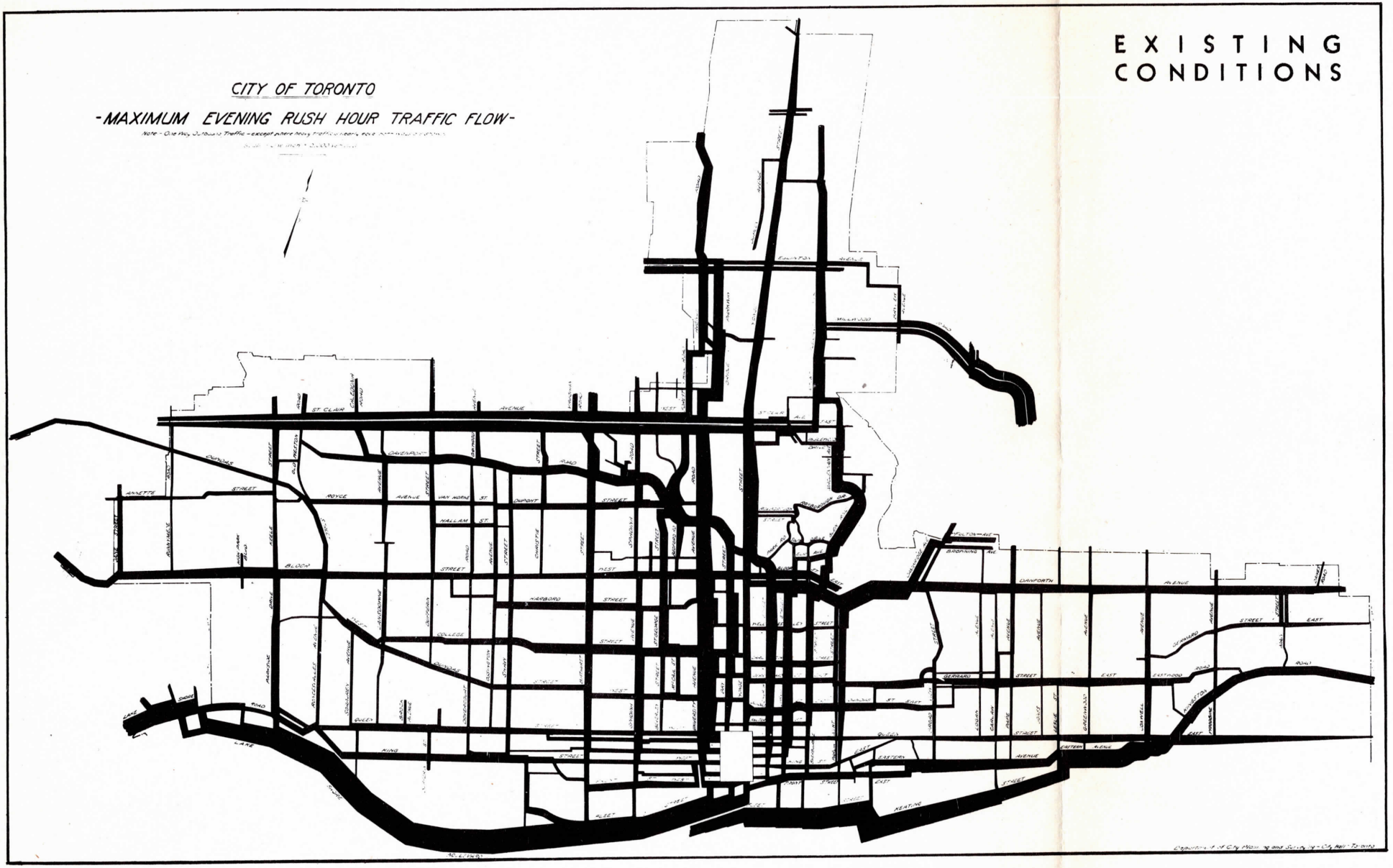
LAND USE

- CONSERVANCY DISTRICT
- PARK AREAS
- POPULATION OVER 1,000

EXISTING CONDITIONS

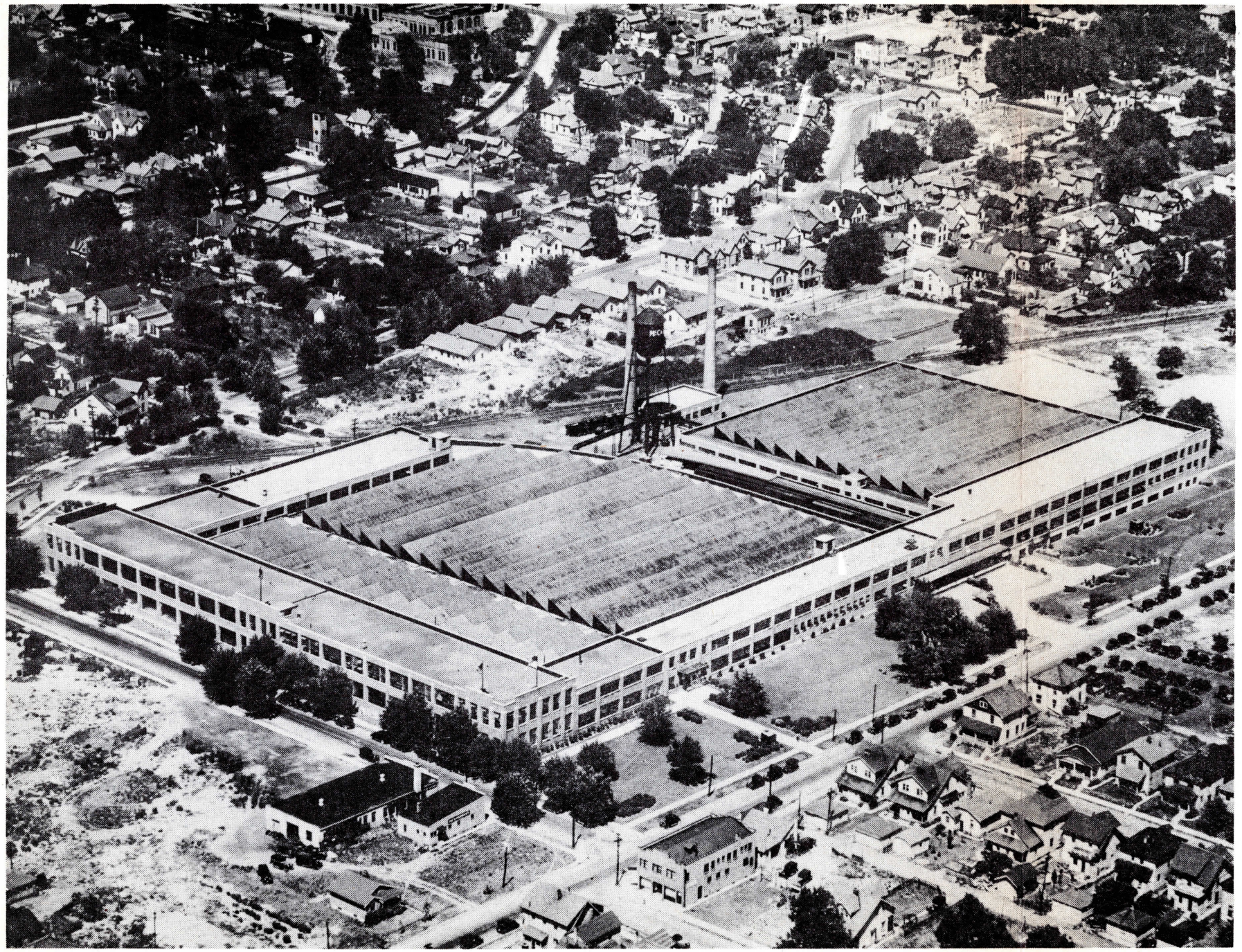
CITY OF TORONTO

-MAXIMUM EVENING RUSH HOUR TRAFFIC FLOW-



MAXIMUM TRAFFIC FLOW

CIRCULATION




44846
MAY 11 '39